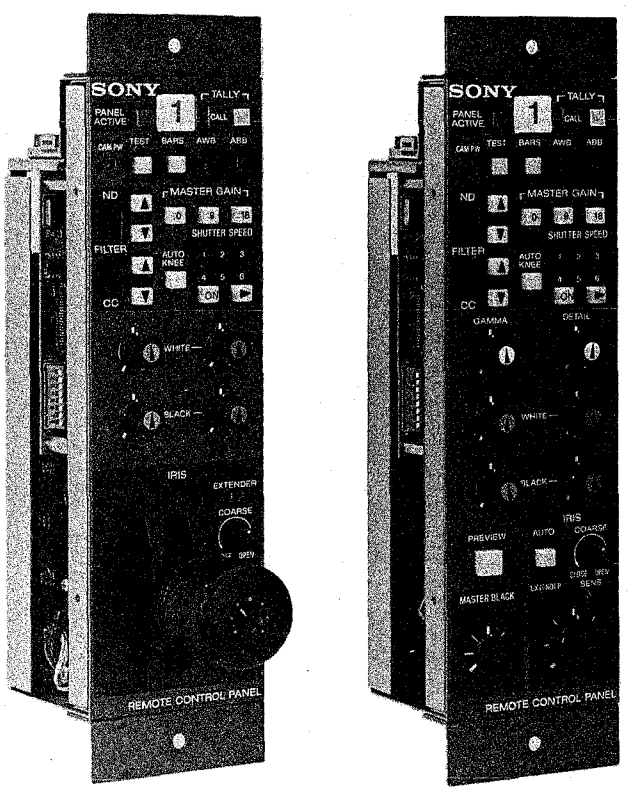
SONY

REMOTE CONTROL PANEL

RCP-3710
RCP-3711



OPERATION AND MAINTENANCE MANUAL

1st Edition (Revised 2)

Serial No. 10001 and Higher

For the customers in the USA

Warning—This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

Important—To insure that the complete system (including this peripheral) is capable of complying with the FCC requirements, it is recommended that the user make sure that the individual equipment of the complete system has a label with one of the following statements.
"This equipment has been tested with a Class A Computing Device and has been found to comply with Part 15 of FCC rules."
—or—
"This equipment complies with the requirements in Part 15 of FCC rules for a Class A Computing Device."
—or equivalent.

The shielded interface cable recommended in this manual must be used with this equipment in order to comply with the limits for a computing device pursuant to Subpart J of Part 15 of FCC rules.

For the customers in Canada

This apparatus complies with the Class A limits for radio noise emissions set out in Radio Interference Regulations.

Pour les utilisateurs au Canada

Cet appareil est conforme aux normes Classe A pour bruits radioélectriques, spécifiés dans le Règlement sur le brouillage radioélectrique.

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第1章　取り扱い操作

1-1. 概要

リモートコントロールパネルRCP-3710/3711は、3板式CCDカラービデオカメラBVP-370/270の調整機能を、カメラコントロールユニットCCU-370を介してリモートコントロールするためのコントロールパネルです。本機は、専用のケーブルでCCU-370に接続することにより、CCU-370から最大200m離して使用することができます。
RCP-3710とRCP-3711は、機能的にはガンマ/ディテイル調整の有無を除いてまったく同一です。形状面では、アイリス/マスターブラック調整部が、RCP-3710ではジョイスティックタイプ、RCP-3711ではつまみという点が異なります。
本機の主な特長は次の通りです。

シンプルな操作性

操作ボタン、調整つまみ等を、機能別に、使う頻度を考慮してパネル上に配置し、さらに操作手順が自照式ボタンの点滅や点灯の状態でわかるように工夫されています。また、誤操作した場合にカメラの動作やセットアップに重大な影響を及ぼすボタンの周囲にはガードを付けるなど、さまざまな機能を簡単に、そして間違いなく操作できるようになっています。

カメラのシャッタースピードをコントロール可能

CCDカメラの電子シャッタースピードを、ボタン操作で6段階に切り換えることができます。

デジタル回線による接続

カメラコントロールユニットと本機との間は、デジタル回線による信号の受け渡しを行います。1本の接続ケーブル (CCA-2) ですべての信号の授受を確実に行うことができます。

ベータカムカメラのコントロールも可能

本機をカメラコントロールユニットCCU-350/355に接続すれば、カメラアダプターを取り付けたベータカムカメラ（BVP-7/50/70/7000HSPなど）もコントロールできます。

19インチのラックに6台取り付け可能

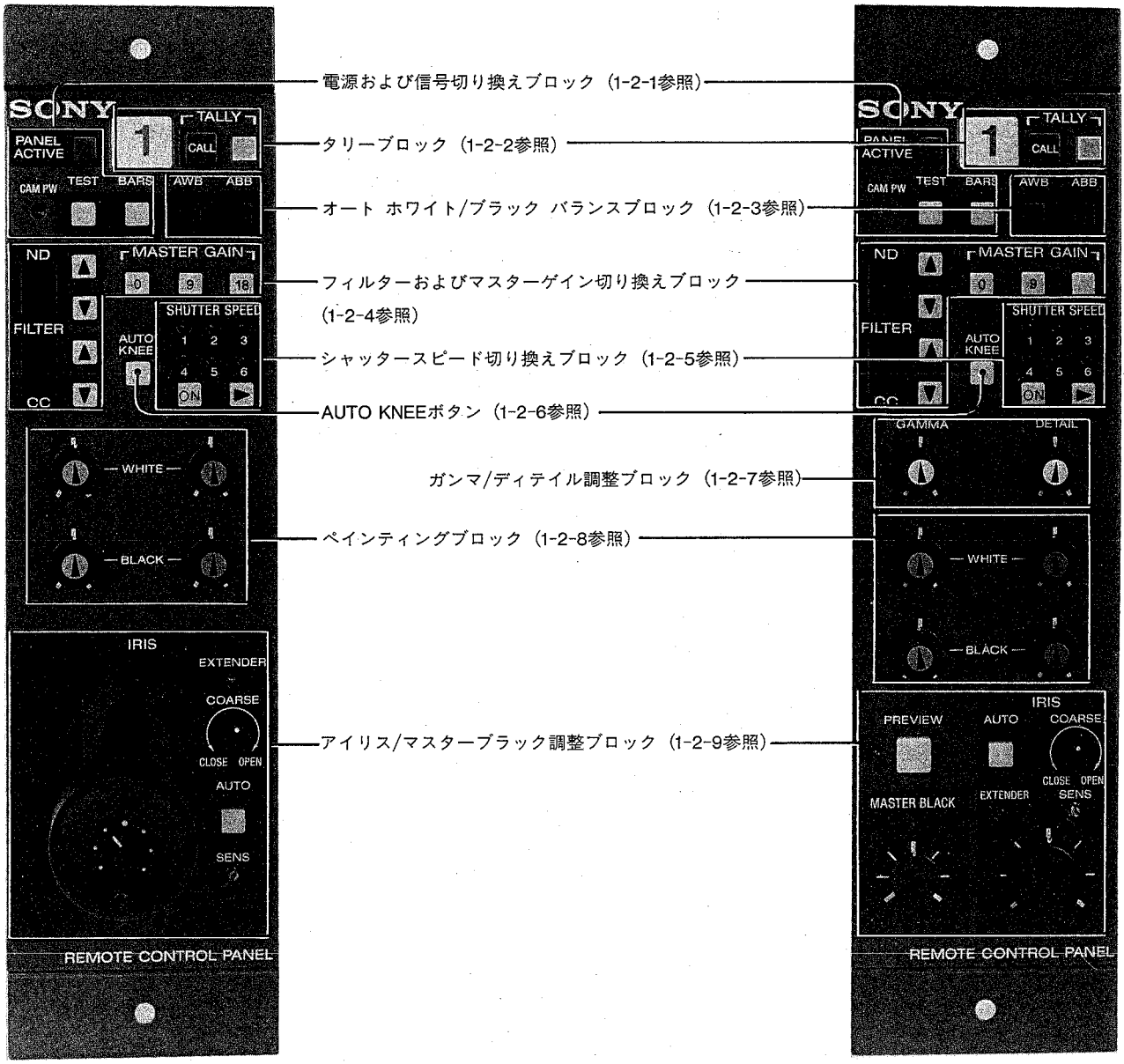
本機は、19インチのEIA標準ラックに6台並べて取り付けることができます。(高さは5ユニット)

本機は、CCDカラービデオカメラ専用のリモートコントロールパネルです。 撮像管式カメラのコントロールはできません。

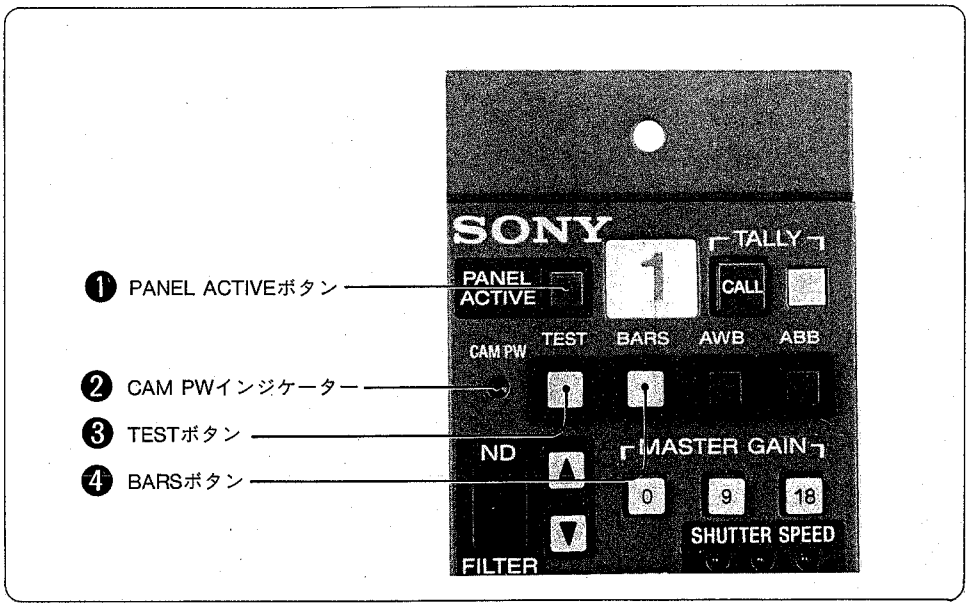
1-2. 各部の名称と働き

RCP-3710

RCP-3711



1-2-1. 電源および信号切り換えブロック



❶ PANEL ACTIVE（パネルアクティブ）ボタン

本機に接続したカメラシステムを、本機でコントロールするときに押して点灯させます。このボタンが消灯しているときは、本機からカメラシステムをコントロールすることはできません。ただし、カメラの現在の状態を表示する機能は、このボタンの消灯時も働きます。

❷ CAM PW（カメラヘッド電源）インジケーター（緑色）

カメラヘッドの電源入/切状態を示し、カメラヘッドに電源が供給されると点灯します。

❸ TEST（テスト）ボタン

押して点灯させると、カメラのテスト信号発生器が作動して、ビデオ回路チェック用のテスト信号（のこぎり波形）が出力されます。

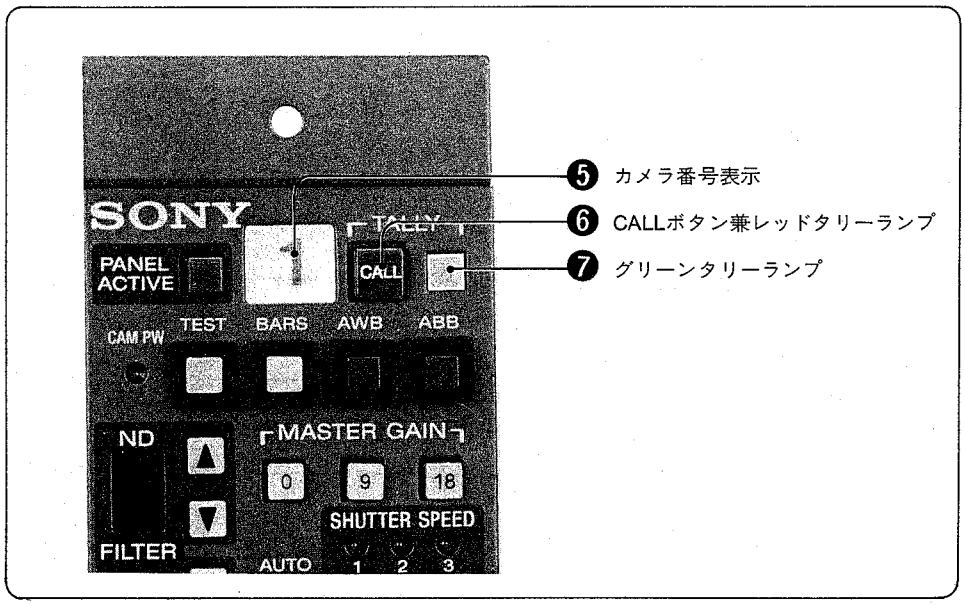
もう一度押して消灯させると、テスト信号は出力されなくなります。

❹ BARS（カラーバー）ボタン

押して点灯させると、カラーバー信号が出力されます。

もう一度押して消灯させると、カラーバー信号は出力されなくなります。

1-2-2. タリーブロック



5 カメラ番号表示

本機でコントロールするカメラと同じ番号のナンバープレート（付属）を、ここに取り付けます。

6 CALL（コール）ボタン兼レッドタリーランプ

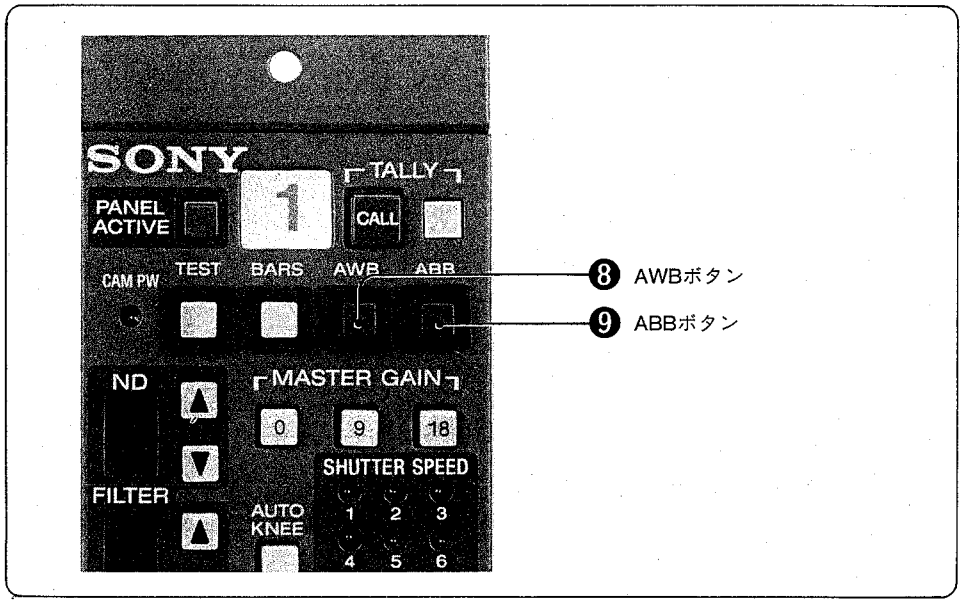
押しているあいだ、カメラヘッドおよびカメラコントロールユニットのレッドタリーランプが点灯します。

また、カメラにレッドタリー信号が入力されると点灯します。

7 グリーンタリーランプ

カメラにグリーンタリー信号が入力されると点灯します。

1-2-3. オート ホワイト/ブラック バランスブロック



8 AWB（自動ホワイトバランス調整）ボタン

押して点灯させると、ホワイトバランスが自動的に調整されます。調整が完了するとボタンは消灯します。

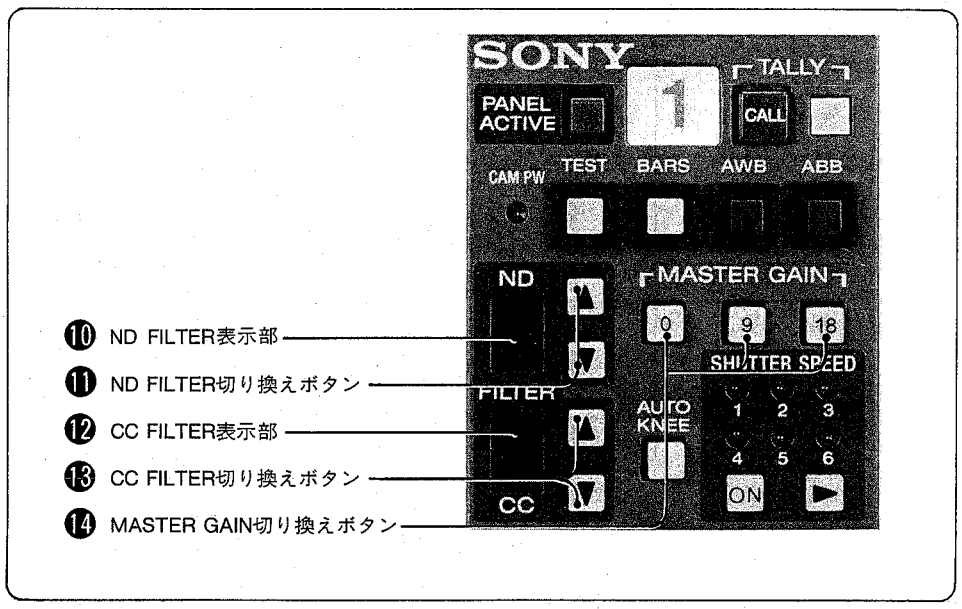
自動調整時にエラーが発生した場合は、ボタンが点滅します。点滅を止めるには、本機のいずれかのボタンを押します。

9 ABB（自動ブラックバランス調整）ボタン

押して点灯させると、ブラックバランスとブラックセットが自動的に調整されます。調整が完了するとボタンは消灯します。

自動調整時にエラーが発生した場合は、ボタンが点滅します。点滅を止めるには、本機のいずれかのボタンを押します。

1-2-4. フィルターおよびマスターゲイン切り換えブロック



⑩ ND FILTER（NDフィルター）表示部

現在選択されているNDフィルターを示します。BVP-370/270のカメラシステムをコントロールするときは、表示される番号とNDフィルターは次のように対応しています。

1: 素通し

2: 1/4 ND

3: 1/8 ND

4: 1/16 ND

⑪ ND FILTER（NDフィルター）切り換えボタン

一度押すと点灯します。点灯中は、押すたびにNDフィルターが次の順序で切り換わります（押し続けると、順次切り換わります）。

▲: → 1 → 2 → 3 → 4 →

▼: → 4 → 3 → 2 → 1 →

⓬ CC FILTER（色温度変換フィルター）表示部

現在選択されている色温度変換フィルターを示します。BVP-370/270のカメラシステムをコントロールするときは、表示される記号と色温度変換フィルターは次のように対応しています。

A: 特殊フィルター*

B: 3200K

C: 4300K

D: 6300K

＊カメラヘッドBVP-370/270の工場出荷時は、クロスフィルターが装着されています。ほかのフィルターをご希望の場合は、ソニーの担当者にご相談ください。

⓭ CC FILTER（色温度変換フィルター）切り換えボタン

一度押すと点灯します。点灯中は、押すたびに色温度変換フィルターが次の順序で切り換わります（押し続けると、順次切り換わります）。

▲: → A → B → C → D →

▼: → D → C → B → A →

なお、⓫と⓭の4つのボタンは、いずれか1つを押せばすべてが点灯し、NDフィルター、色温度変換フィルターともに切り換え可能となります。

⓮ MASTER GAIN（マスターゲイン）切り換えボタン

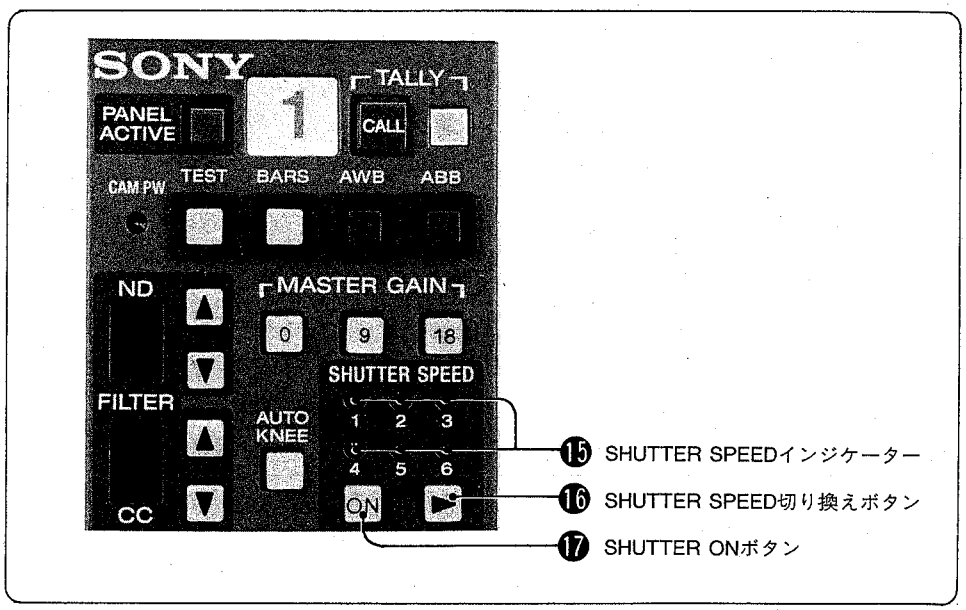
被写体の照度に応じて映像利得を切り換えたいとき、希望のボタンを押して点灯させます。

0: 0dB

9: 9dB

18: 18dB

1-2-5. シャッタースピード切り換えブロック



⓯ SHUTTER SPEED（シャッタースピード）インジケーター（緑色）

現在選択されているシャッタースピードに対応するインジケーターが点灯します。

1: 1/100秒

2: 1/125秒

3: 1/250秒

4: 1/500秒

5: 1/1000秒

6: 1/2000秒

⓰ SHUTTER SPEED（シャッタースピード）切り換えボタン

SHUTTER ON ボタン ⓱ を押して点灯させると、このボタンも点灯し、もう一度SHUTTER ON ボタンを押して消灯させると、このボタンも消灯します。

このボタンの点灯時は、押すたびにシャッタースピード（単位：秒）が次の順序で切り換わります（押し続けると、順次切り換わります）。

→ 1/100 → 1/125 → 1/250 → 1/500 → 1/1000 → 1/2000 →

消灯時は、ボタンを押しても、本機側におけるシャッタースピードの選択が替わる(点灯するSHUTTER SPEEDインジケーター⓯が替わる）だけで、カメラのシャッタースピードそのものは切り換わりません。

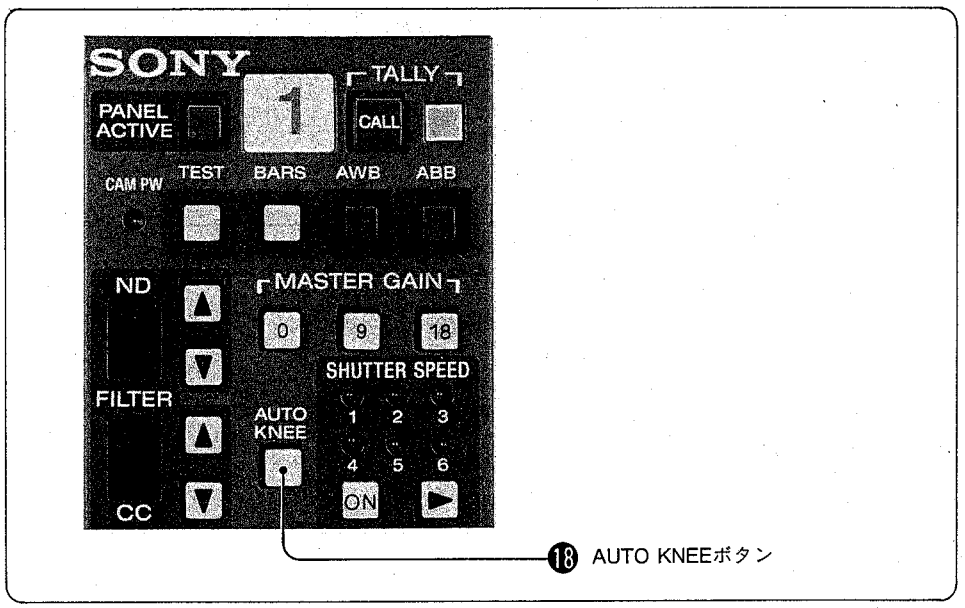
⓱ SHUTTER ON（シャッター オン）ボタン

押して点灯させると、現在選択されている(すなわちSHUTTER SPEEDインジケーター⓯が示している）シャッタースピードで、カメラの電子シャッターが動作します。

もう一度押して消灯させると、シャッターは動作しなくなります。

このボタンの点灯時は、SHUTTER SPEED切り換えボタン⓰で、実際にカメラのシャッタースピードを切り換えることができます。

1-2-6. AUTO KNEEボタン

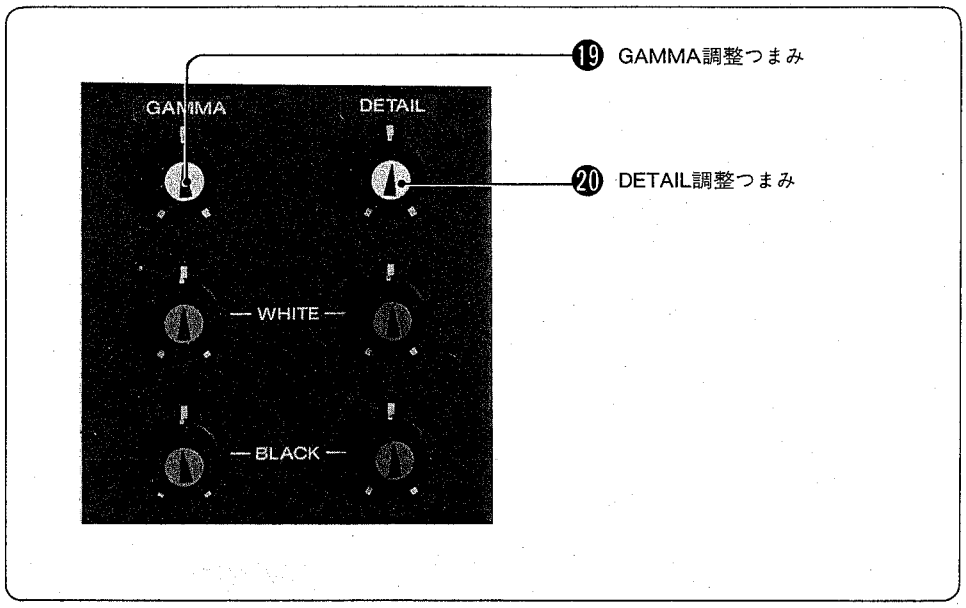


⓲ AUTO KNEE（オートニー）ボタン

押して点灯させると、カメラヘッドのオートニー回路が作動します。

もう一度押して消灯させると、オートニー回路は作動しなくなります。

1-2-7. ガンマ/ディテイル調整ブロック（RCP-3711のみ）



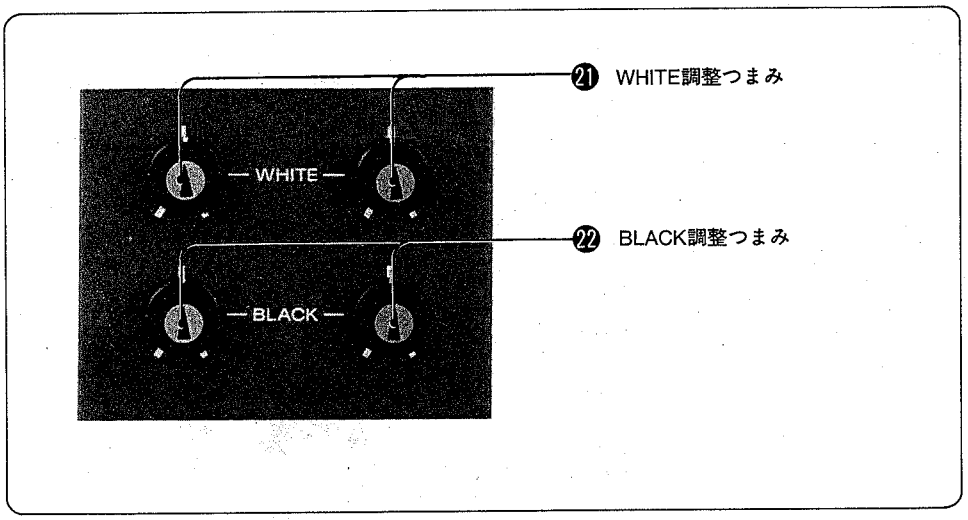
⑲ GAMMA（ガンマ）調整つまみ

マスターガンマ調整用のつまみです。

⑳ DETAIL（ディテイル）調整つまみ

ディテイル調整用のつまみです。

1-2-8. ペインティングブロック



㉑ WHITE（ホワイトバランス）調整つまみ

ホワイトバランス手動調整用のつまみです。オートホワイトバランス実行後のペインティング用に使うことができます。

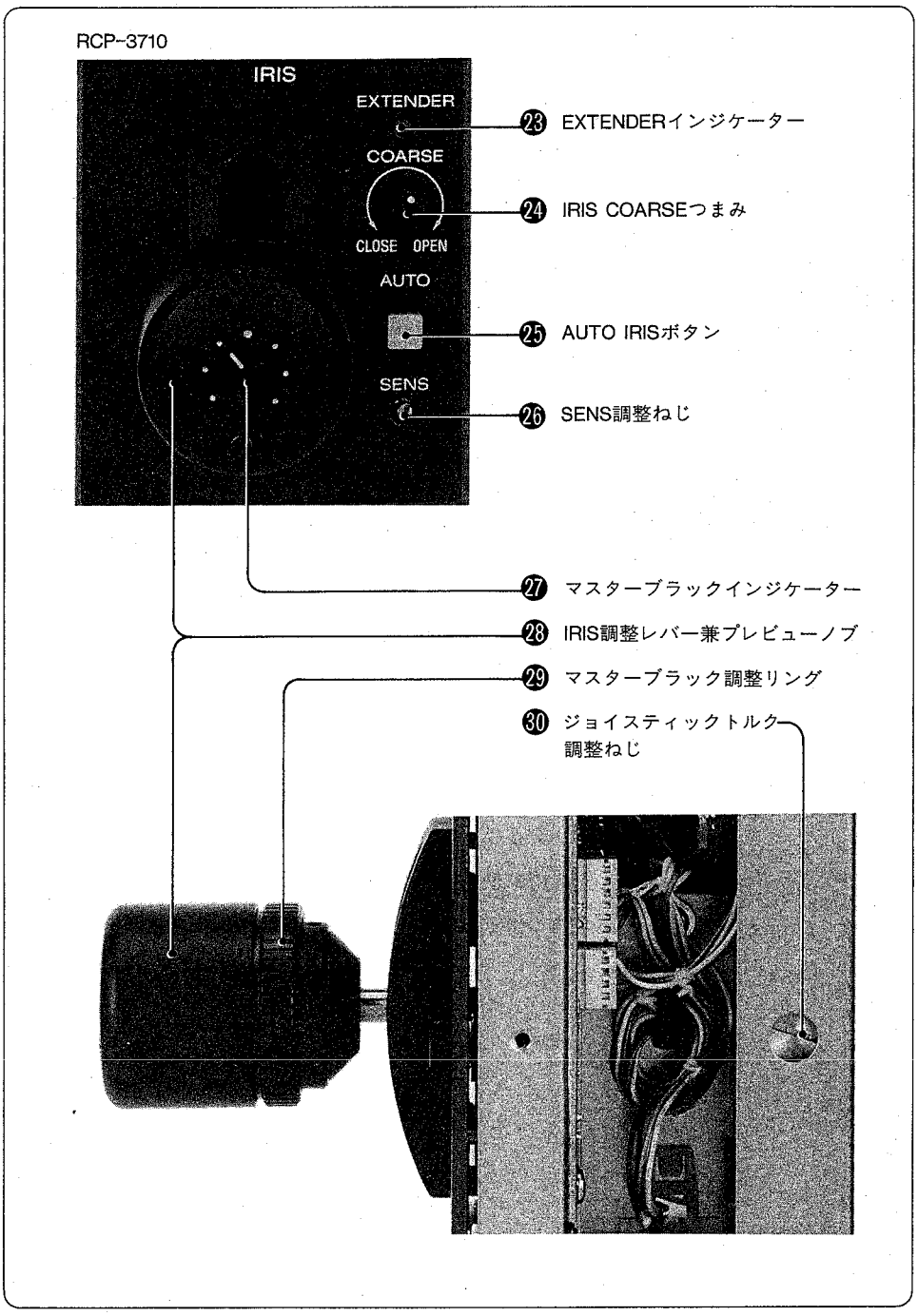
左側のつまみはR信号用、右側のつまみはB信号用です。つまみの中央にクリックがあります。

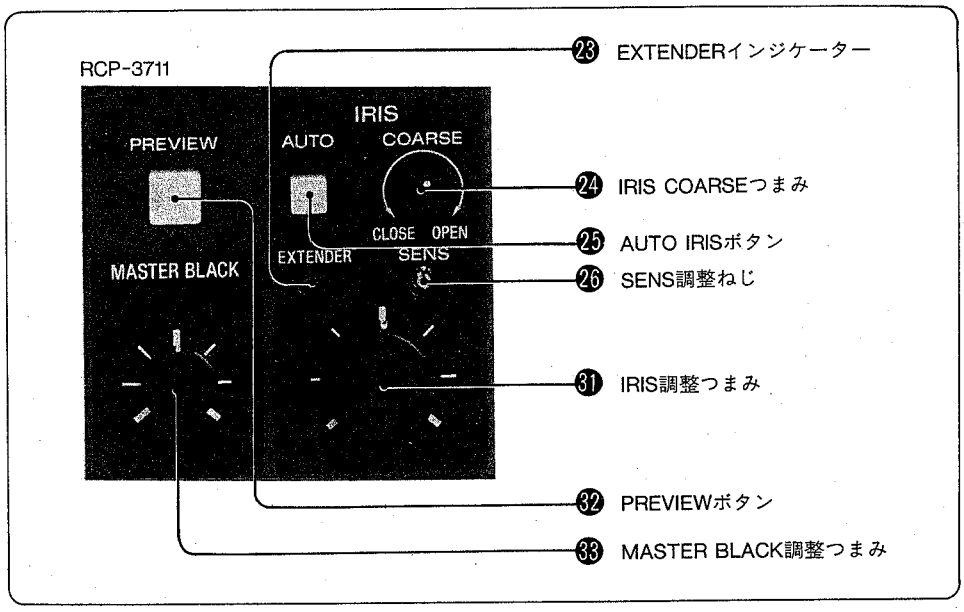
㉒ BLACK（ブラックバランス）調整つまみ

ブラックバランス手動調整用のつまみです。オートブラックバランス実行後のペインティング用に使うことができます。

左側のつまみはR信号用、右側のつまみはB信号用です。つまみの中央にクリックがあります。

1-2-9. アイリス/マスターブラック調整ブロック





㉓ EXTENDER（レンズエクステンダー）インジケーター（こはく色）

レンズエクステンダーを使用しているとき点灯します。

㉔ IRIS COARSE（アイリス粗調整）つまみ

レンズの絞りを粗調整するためのつまみです。

㉕ AUTO IRIS（自動レンズ絞り）ボタン

押して点灯させると、レンズの絞りが自動調整されます。入力光に応じて自動的に絞りが調整され、基準の明るさの映像が得られます。ボタン点灯時にIRIS調整レバー㉘(RCP-3710) またはIRIS調整つまみ㉛ (RCP-3711) を動かすと、自動調整の基準値を±1Fの範囲で変えることができます。(中央が標準値)

もう一度押して消灯させると、IRIS調整レバーまたはIRIS調整つまみで絞りを手動調整することができます。

㉖ SENS（アイリス微調整感度）調整ねじ

IRIS調整レバー㉘ (RCP-3710) またはIRIS調整つまみ㉛ (RCP-3711) で手動調整できる絞りの可変範囲を設定します。ドライバーで回して調整します。右に回すと感度が上がり、可変範囲が狭くなります。

㉗ **マスターブラックインジケーター（RCP-3710）**

マスターブラック調整リング㉙を回すと一緒に回転し、マスターブラックのおおよその調整値を示します。

㉘ **IRIS（アイリス）調整レバー兼プレビューノブ（RCP-3710）**

AUTO IRISボタン㉕の消灯時に、このレバーを前後に動かして絞りを手動調整することができます。(調整範囲の中心はIRIS COARSEつまみ㉔で、幅はSENS調整ねじ㉖で調整することができます。)

AUTO IRISボタン点灯時は、このレバーで、絞り自動調整の基準値を±1Fの範囲で調整できます。

レバー（ノブ）を軸方向に押すと、プレビュー用キー信号がPREVIEWコネクター（1-2-10参照）から出力され、本機でコントロールしているカメラの映像信号がモニターに表示されます。

㉙ **マスターブラック調整リング（RCP-3710）**

マスターブラック手動調整用のリングです。リングを回すとマスターブラックインジケーター㉗も一緒に回転し、おおよその調整値を示します。

㉚ **ジョイスティックトルク調整ねじ（RCP-3710）**

IRIS調整レバー㉘を前後に動かすときのレバーの動きの固さを、ドライバーで調整します。右に回すとレバーの動きが固くなります。

㉛ **IRIS（アイリス）調整つまみ（RCP-3711）**

AUTO IRISボタン㉕の消灯時に、このつまみでレンズの絞りを手動調整することができます。(調整範囲の中心はIRIS COARSEつまみ㉔で、幅はSENS調整ねじ㉖で調整することができます。)

AUTO IRISボタン点灯時は、このつまみにより、絞りの自動調整の基準値を±1Fの範囲で調整できます。

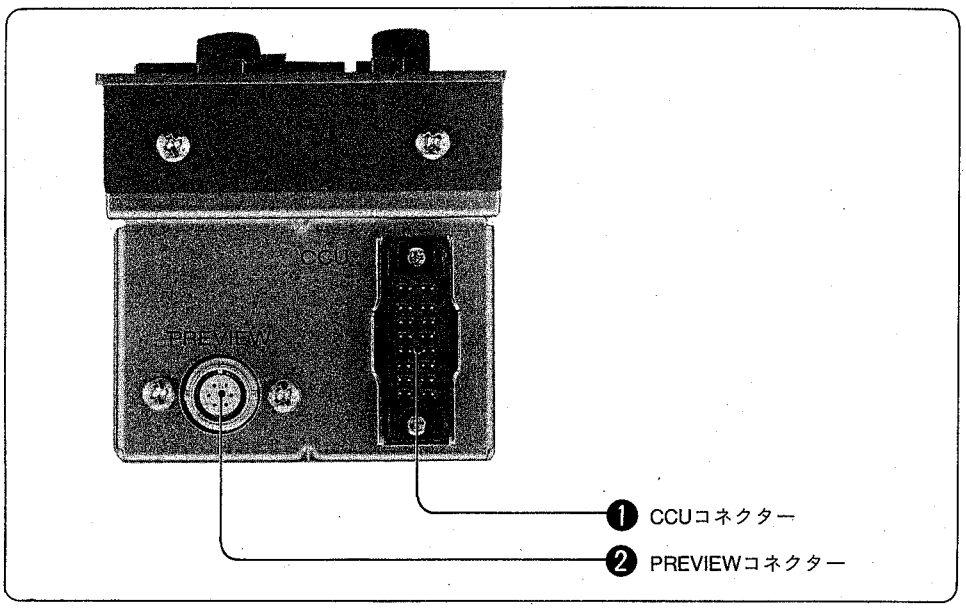
㉜ **PREVIEW（プレビュー）ボタン（RCP-3711）**

押して点灯させると、プレビュー用キー信号がPREVIEWコネクター（1-2-10参照）から出力され、本機でコントロールしているカメラの映像信号がモニターに表示されます。

㉝ **MASTER BLACK（マスターブラック）調整つまみ（RCP-3711）**

マスターブラック調整用のつまみです。

1-2-10. コネクターパネル



1 CCUコネクター（16ピン）

カメラコントロールユニットのRCPコネクター（16ピン）に接続します。電源およびコントロール信号の受け渡しをします。詳しくは「1-3-1. CCUの接続」を参照してください。

2 PREVIEW（プレビュー）コネクター

RCP-3710の場合は、プレビューノブ入/切の信号を外部のビデオスイッチャーなどに出力します。

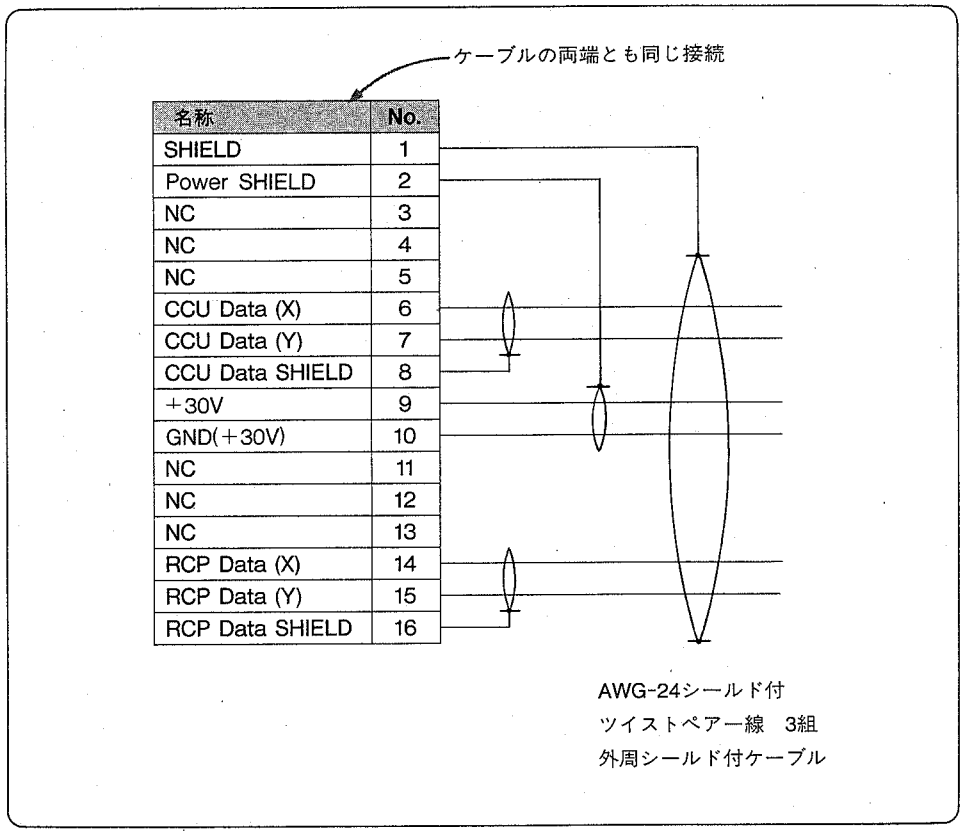
RCP-3711の場合は、PREVIEWボタンのオン/オフ信号の出力とボタン点灯用電源の入力を、外部のビデオスイッチャーなどとの間で行います。

詳しくは「1-3-2. プレビューコネクター」を参照してください。

1-3. 接続

1-3-1. CCUの接続

カメラコントロールユニットと本機の接続には、別売りのカメラ接続ケーブルCCA-2-30（長さ30m）を使用します。これ以外のケーブル（ただしCCA-2相当）をお使いになるときは、付属の16ピンコネクターを使って、下図のように配線してください（長さは200mを超えないようにしてください）。



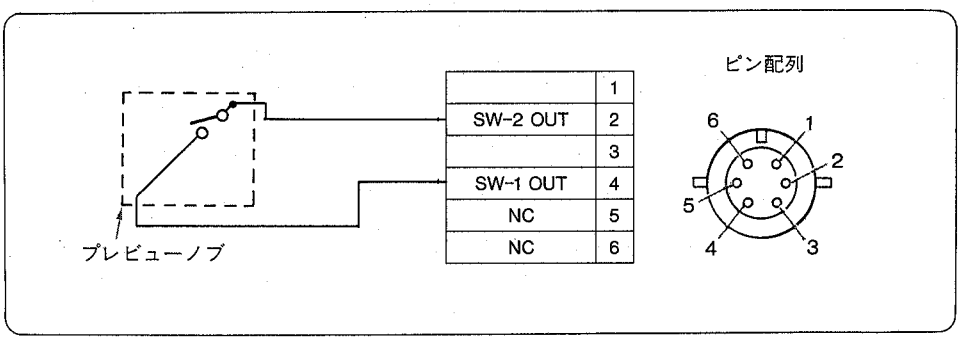
名称	No.
SHIELD	1
Power SHIELD	2
NC	3
NC	4
NC	5
CCU Data (X)	6
CCU Data (Y)	7
CCU Data SHIELD	8
+30V	9
GND(+30V)	10
NC	11
NC	12
NC	13
RCP Data (X)	14
RCP Data (Y)	15
RCP Data SHIELD	16

1-3-2. プレビューコネクター

PREVIEWコネクターは下図のように配線されており、外部のビデオスイッチャーなどをコントロールできます。

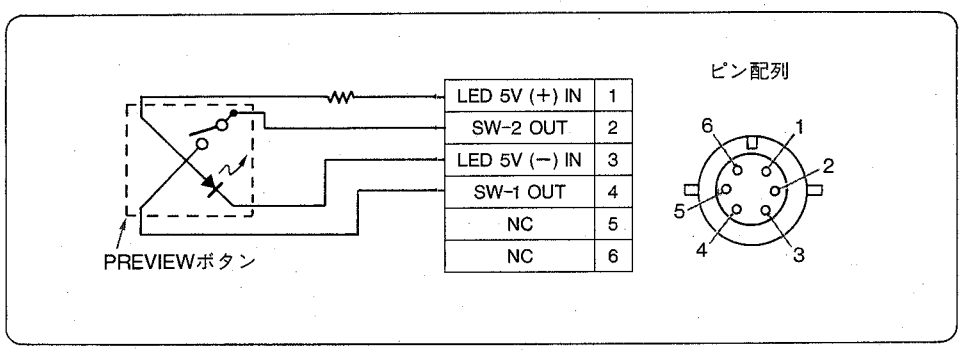
RCP-3710

プレビューノブのSWの最大電流は1mAです。



RCP-3711

PREVIEWボタン用の電源は5V、SWの最大電流は1mAです。



1-4. 操作

本機を使ってカメラシステムをコントロールするには、必ずPANEL ACTIVEボタンを押して点灯させます。ボタン消灯時はコントロールできません。

1-4-1. ホワイトバランスとブラックバランスの自動調整

ホワイトバランスとブラックバランスの自動調整は、下記の手順で行います。

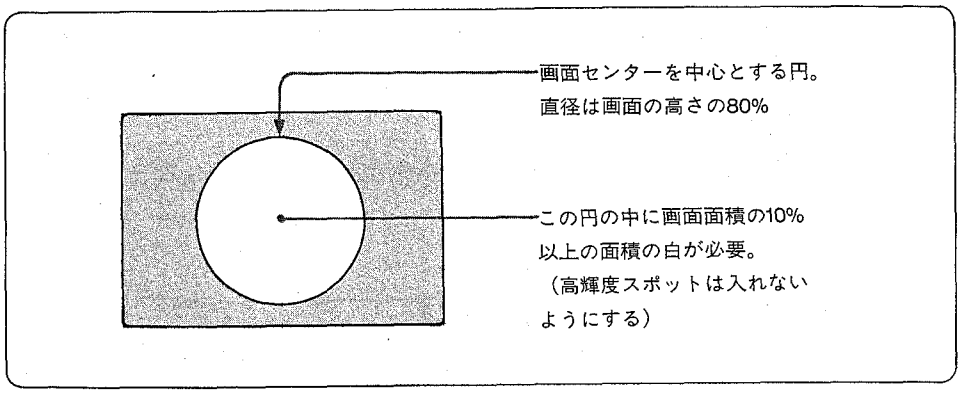
1 AUTO IRISボタンを押して点灯させ、絞りを自動調整モードにします。

2 WHITE調整つまみとBLACK調整つまみをすべて中央位置にします。*

3 被写体を照らす光源に合わせ、CC FILTER切り換えボタンで色温度変換フィルターを選びます。

4 必要に応じて、ND FILTER切り換えボタンでNDフィルターを切り換えます。

5 ホワイトパターンを写します。白いもの（白い紙、白い壁など）で代用することもできます。



6 AWBボタンを押して点灯させ、ホワイトバランスを調整します。
調整が完了するとボタンが消灯します。**

7 ABBボタンを押して点灯させ、ブラックバランスを調整します。
調整が完了するとボタンが消灯します。**

---

* 手順2でWHITEとBLACKの調整つまみを中央位置にしなくても、ホワイト/ブラックバランスは調整されます。ただし、その後のペインティングの可変範囲がつまみの位置よって制限されることになります（相対値モード）。その場合でも、いったんつまみを左右いっぱいに回せば、中央を基準値とした可変範囲に変わります（絶対値モード）。

** 調整中にエラーが発生した場合は、ボタンが点滅して知らせます。点滅を止めるには、本機のいずれかのボタンを押します。

1-4-2. 絞りの調整

レンズの絞りは、AUTO IRISボタンを押して点灯させておくと、自動的に調整されますが、必要に応じて手動で調整することもできます。

自動調整

1 IRIS調整レバー (RCP-3710) またはIRIS調整つまみ (RCP-3711) を中央の位置にします。

2 AUTO IRISボタンを押して点灯させます。
絞りは入力光に応じて自動的に最適値に調整されます。

・AUTO IRISボタンが点灯し、絞りが自動調整になっているとき、IRIS調整レバーまたはIRIS調整つまみを動かすと、自動調整の基準値を±1Fの範囲で変えることができます。

手動調整

調整範囲の設定

1 AUTO IRISボタンが点灯しているときは、ボタンを押して消灯させます。

2 IRIS調整レバー (RCP-3710) またはIRIS調整つまみ (RCP-3711) を中央の位置にします。

3 IRIS COARSEつまみで、IRIS調整レバーまたはIRIS調整つまみによる調整範囲の中心値を設定します。

4 RCP-3710の場合はIRIS調整レバーを前後いっぱいに動かし、RCP-3711の場合はIRIS調整つまみを左右いっぱいに回して、絞りの調整範囲を確認します。
調整範囲を変更したいときは、ドライバーでSENS調整ねじを回して調整します。
右へ回すと調整範囲が狭くなります。

調整

IRIS調整レバーまたはIRIS調整つまみを動かして、最適な映像が得られるように絞りを調整します。

1-5. 仕様

入出力コネクター	CCUコネクター（16ピン）
	PREVIEWコネクター（6ピン）
電源	DC 30V
消費電力	3W
最大ケーブル長	200m（CCA-2ケーブルまたは同等品使用の場合）
重さ	RCP-3710: 1.0kg
	RCP-3711: 0.8kg
外形寸法（幅/高さ/奥行き）	RCP-3710: 68×265×127mm
	RCP-3711: 68×265×84mm
	（最大突起部を含む）
付属品	16ピンコネクター（2セット）
	6ピンコネクター（1）
	ナンバープレート（1式）
	オペレーション アンド メンテナンスマニュアル（1）
別売りアクセサリー	カメラ接続ケーブル CCA-2-30

本機の仕様および外観は、改良のため予告なく変更することがありますが、ご了承ください。

Section 1. OPERATION

1-1. Overview

The RCP-3710/3711 remote control panel is designed for remote control of those functions of the BVP-370/370P/270/270P 3-chip CCD color video camera which are used most frequently in daily operation. The panel is to be connected to the CCU-370/370P camera control unit by a special cable with a length of up to 200 m, and control the camera functions via the camera control unit.
In terms of both functions and parts arrangement, the RCP-3710 and RCP-3711 are basically the same with only limited exceptions: for one thing, while the RCP-3710 does not have a gamma and detail adjustment block, the RCP-3711 does have. For another, while the RCP-3710 uses a joystick type of control for iris adjustment, the RCP-3711 uses a rotary knob for iris control.
The principal features of the RCP-3710/3711 are as follows:

Simple operation
The controls such as buttons and knobs are arranged on the panel according to function with consideration given to the frequencies at which they are used. In addition, the buttons blink or light up in such a way that the operator is smoothly guided to follow the correct operating procedure. Furthermore, those buttons which, if pressed by mistake, might seriously affect the camera operation or setup are each protected with a guard frame. This and other features ensure easy and error-free operation of many different functions.

Shutter speed control
The electronic-shutter speed of the CCD camera can be varied through a range of six speeds.

Signal transmission via digital line
Between this remote control panel and the camera control unit, signals are digitally transmitted via a single connection cable (CCA-2-30), ensuring reliable signal transmission.

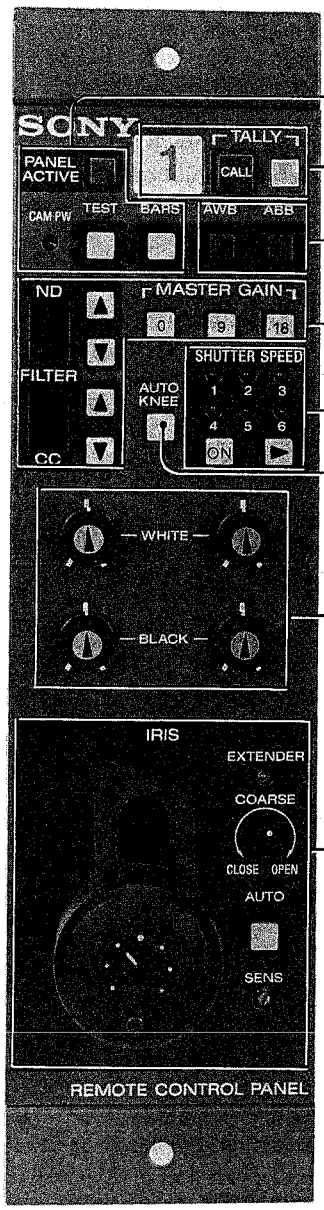
Betacam camera control
When connected to the CCU-350/350P/355/355P camera control unit, the panel can be used to control a Betacam-series camera (such as BVP-7/7P/50/50P/70/70P/7000HS/7000HSP) attached with a camera adaptor.

Six units mountable on 19-inch rack
Up to six units of this remote control panel can be mounted on a 19-inch EIA standard rack (five rack units high).

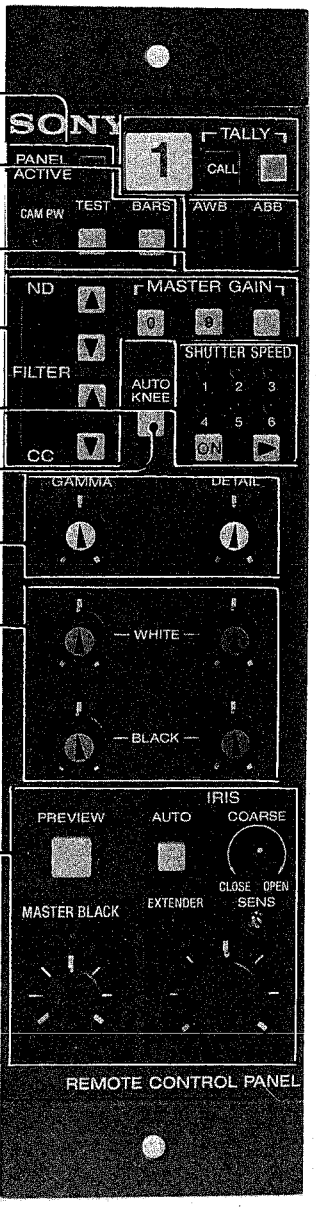
> This remote control panel is designed for exclusive use with CCD color video cameras. It cannot be used to control video cameras with tube type pickup device.

1-2. Locations and Functions of Parts and Controls

RCP-3710



RCP-3711



Power supply and signal selector block (See 1-2-1.)

Tally block (See 1-2-2.)

Auto white/black balance block (See 1-2-3.)

Filter and master gain selector block (See 1-2-4.)

Shutter speed selector block (See 1-2-5.)

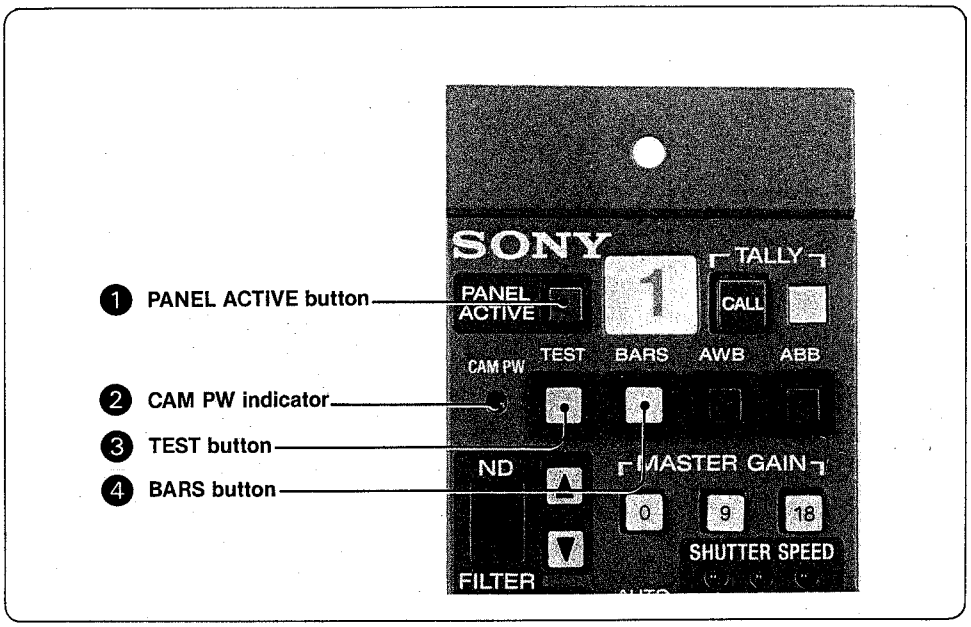
AUTO KNEE button (See 1-2-6.)

Gamma and detail adjustment block (See 1-2-7.)

Painting block (See 1-2-8.)

Iris and master black adjustment block (See 1-2-9.)

1-2-1. Power Supply and Signal Selector Block



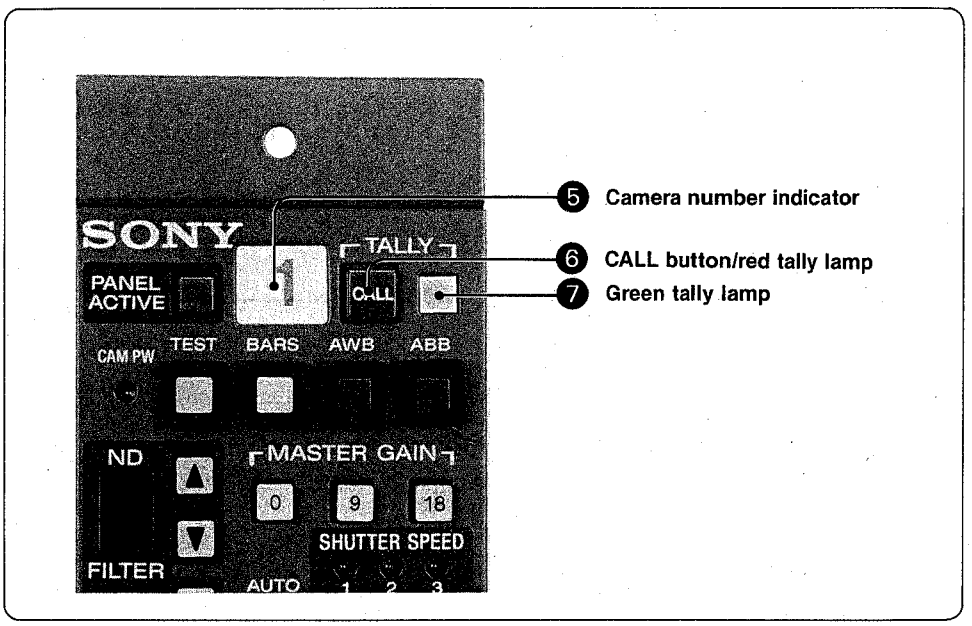
1 PANEL ACTIVE button
When this button is pressed, it lights and makes it possible to control the camera system from this remote control panel. The camera system cannot be controlled from the panel unless this button is lit. However, even with this button unlit, the function of the panel to indicate the current condition of the camera system is effective.

2 CAM PW (camera head power supply) indicator (green)
This indicator indicates whether the camera head is powered. It lights when the camera head is turned on.

3 TEST button
When this button is pressed, it lights and causes the test signal generator in the camera head to output the video circuit testing signal of sawtooth waveform.
To turn off the test signal generator, press this button again, turning its light off.

4 BARS button
When this button is pressed, it lights and causes the color bar signal to be output.
To cut off the color bar signal, press this button again, turning its light off.

1-2-2. Tally Block

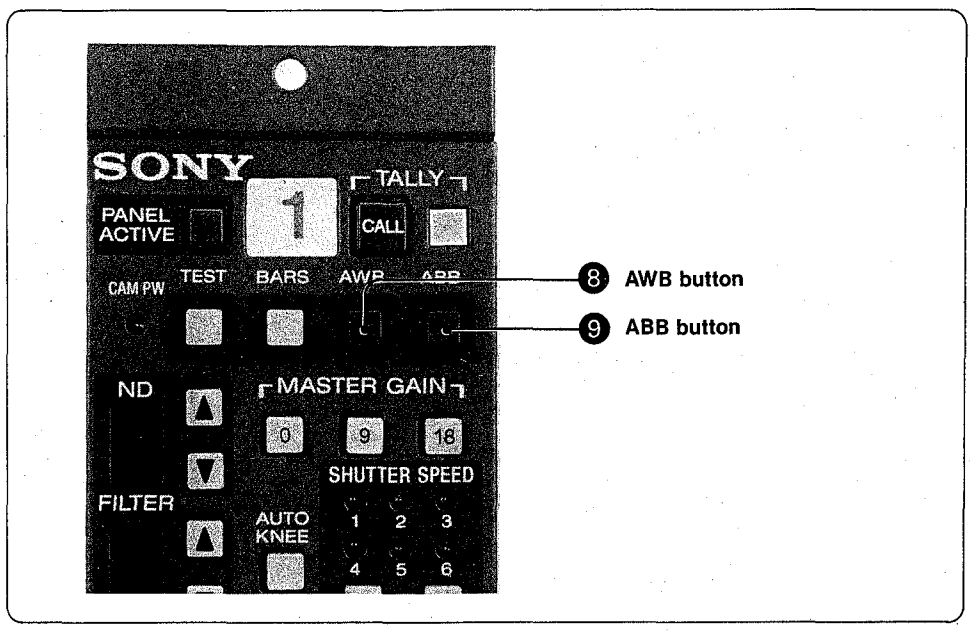


5 Camera number indicator
Attach the number plate (supplied) corresponding to the number of the camera which is to be controlled from this panel.

6 CALL button/red tally lamp
While the button is pressed, a call signal is transmitted to the camera head and the camera control unit, keeping their red tally lamps lit.
The button also works as a red tally lamp: it lights when a red tally signal is input to the camera.

7 Green tally lamp
This lamp lights when a green tally signal is input to the camera.

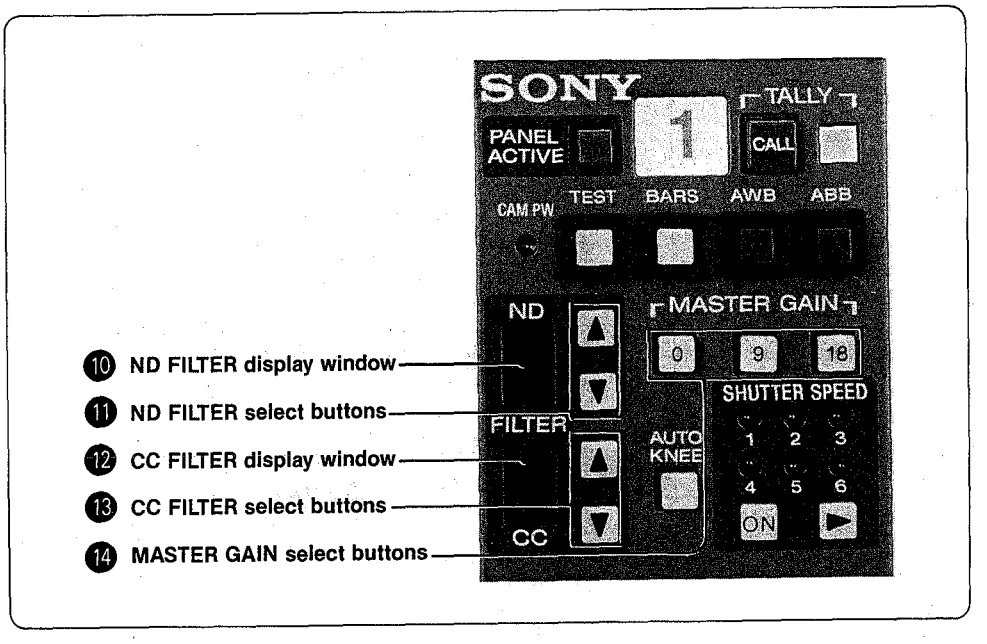
1-2-3. Auto White/Black Balance Block



8 AWB (automatic white balance adjustment) button
When this button is pressed, it lights and white balance is automatically adjusted. It goes out upon completion of the automatic adjustment.
If an error occurs during the automatic adjustment, this button starts blinking. To stop it from blinking, press any button on the panel.

9 ABB (automatic black balance adjustment) button
When this button is pressed, it lights and the black balance and black set are automatically adjusted. It goes out upon completion of the automatic adjustment.
If an error occurs during the automatic adjustment, this button starts blinking. To stop it from blinking, press any button on the panel.

1-2-4. Filter and Master Gain Selector Block



⑩ ND FILTER display window

This display window indicates the current ND filter selection. When this panel is used to control the BVP-370/370P/270/270P camera system, the numbers which are displayed here and the ND filter selections correspond as follows:

1: Clear
2: 1/4 ND
3: 1/8 ND
4: 1/16 ND

⑪ ND FILTER select buttons

Once either button is pressed, both buttons (and also the CC FILTER select buttons ⑬) light up.

Every time one or the other ND FILTER select button is pressed while lit, the ND filter selection changes as shown below. (If the button is kept pressed, the filter selection continues to change.)

▲: ┌→ 1 → 2 → 3 → 4 ┐

▼: ┌→ 4 → 3 → 2 → 1 ┐

⓬ **CC (color temperature conversion) FILTER display window**

This display window indicates the current CC filter selection. When this panel is used to control the BVP-370/370P/270/270P camera system, the letters which are displayed here and the ND filter selections correspond as follows:

A: Special filter*
B: 3200 K
C: 4300 K
D: 6300 K

* The special filter installed in the BVP-370/370P/270/270P camera head as shipped is a cross filter. If a different filter is desired as special filter, please contact your authorized Sony dealer.

⓭ **CC (color temperature conversion) FILTER select buttons**

Once either button is pressed, both buttons (and also the ND FILTER select buttons ⓫) light up.

Every time one or the other CC FILTER select button is pressed while lit, the CC filter selection changes as shown below. (If the button is kept pressed, the filter selection continues to change.)

▲: ↱ A → B → C → D ┐

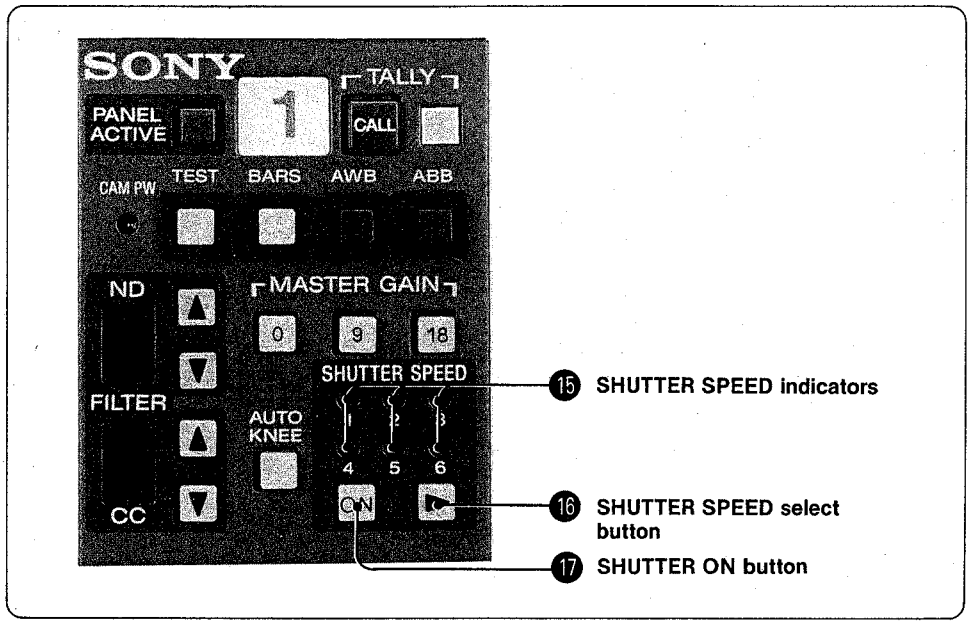
▼: ↱ D → C → B → A ┐

⓮ **MASTER GAIN select buttons**

When one of these buttons is pressed, it lights and the corresponding video gain is obtained. Use these buttons to select an appropriate video gain according to the illuminance of the subject which is to be shot.

0: 0 dB
9: 9 dB
18: 18 dB

1-2-5. Shutter Speed Selector Block



⓯ SHUTTER SPEED indicators (green)

That indicator which corresponds to the current shutter speed selection stays lit.

1: 1/100 sec (NTSC)
   1/60 sec (PAL)
2: 1/125 sec
3: 1/250 sec
4: 1/500 sec
5: 1/1000 sec
6: 1/2000 sec

⓰ SHUTTER SPEED select button

This button lights up when the SHUTTER ON button ⓱ is pressed to light up, and goes out when the SHUTTER ON button is pressed again to go out.
Every time this button is pressed while it is lit, the shutter speed (in seconds) of the camera changes as shown below. (If the button is kept pressed, the shutter speed continues to change.)

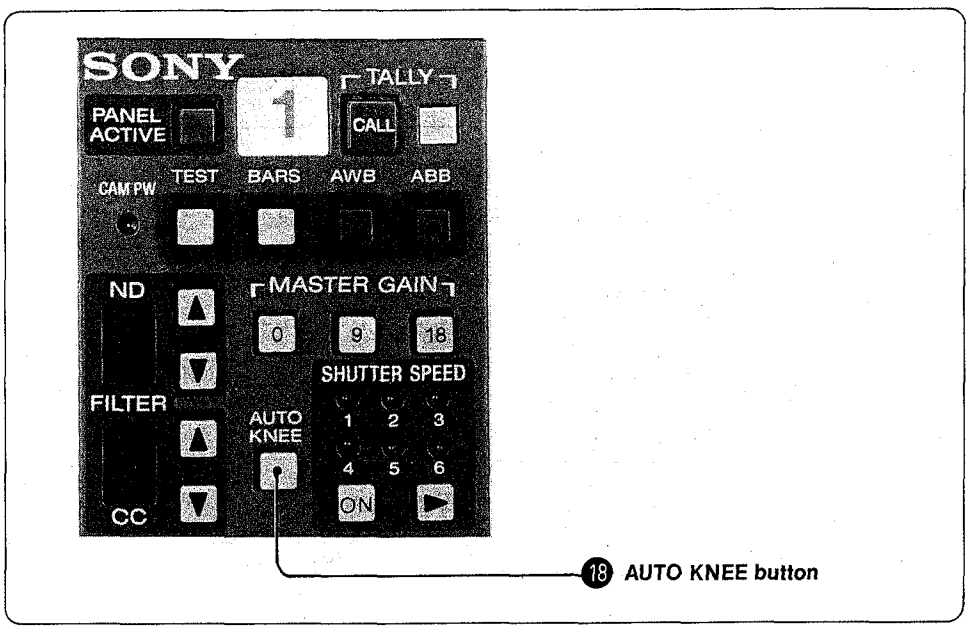
→ 1/100 (NTSC), 1/60 (PAL) → 1/125 → 1/250 → 1/2000 → 1/1000 →1/500 ┐

When this button is unlit, pressing it does not cause the shutter speed to be changed on the part of the camera, only resulting in that the shutter speed selection on the part of this panel is changed (namely, the lit one of the SHUTTER SPEED indicators ⓯ goes out and a different indicator lights up.)

⓱ SHUTTER ON button

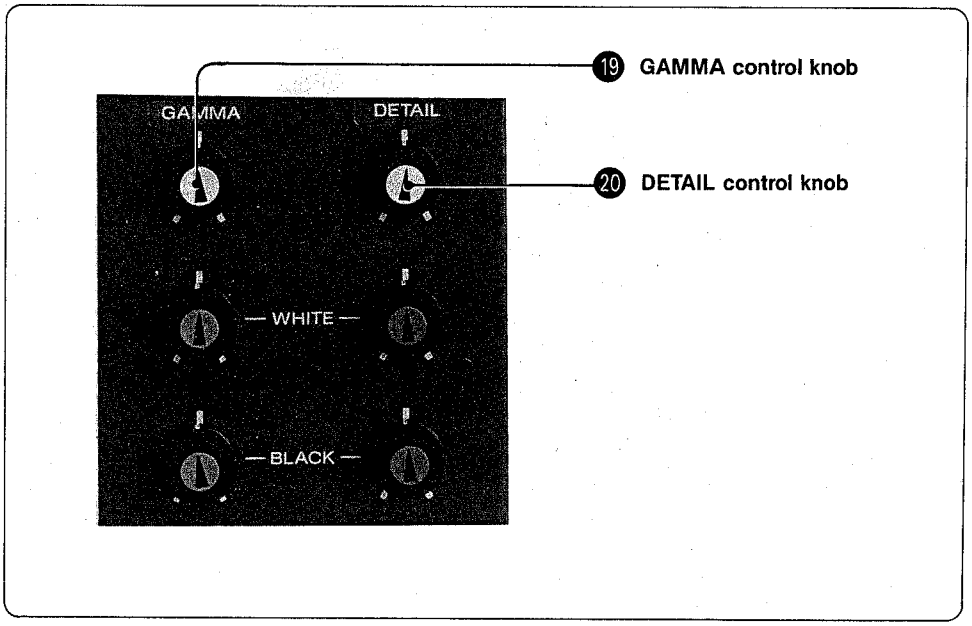
When this button is pressed, it lights and the electronic shutter of the camera starts operating at the currently selected speed (namely the speed indicated by the lit one of the SHUTTER SPEED indicators ⓯.)
To stop the shutter operation, press this button again to make it go out.
When this button is lit, you can change the camera's shutter speed using the SHUTTER SPEED select buttons ⓰.

1-2-6. AUTO KNEE Button



⑱ AUTO KNEE button
When this button is pressed, it lights and the AUTO KNEE circuit of the camera head is activated. When it is pressed again, it goes out, causing the AUTO KNEE circuit to be deactivated.

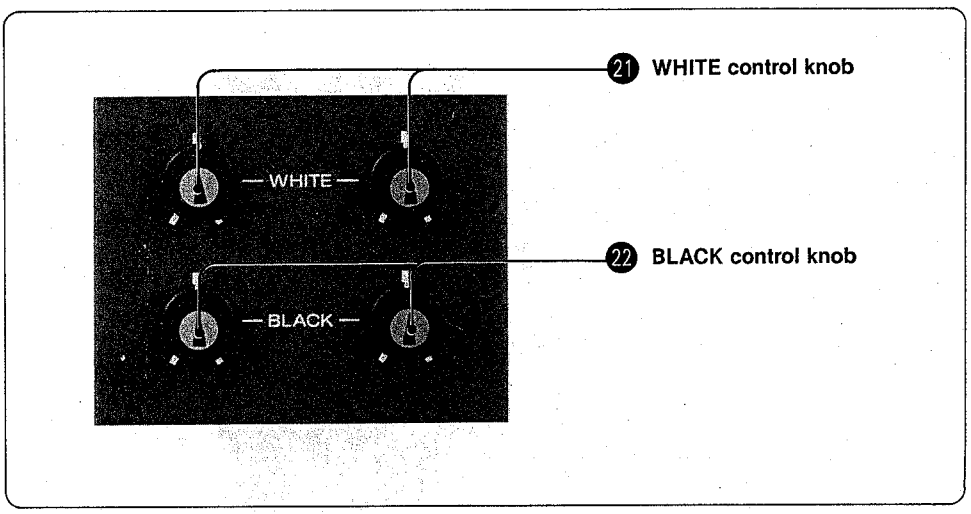
1-2-7. Gamma and Detail Adjustment Block (provided only on the RCP-3711)



19 GAMMA control knob
Used to adjust the master gamma.

20 DETAIL control knob
Used to adjust the detail for contour correction.

1-2-8. Painting Block

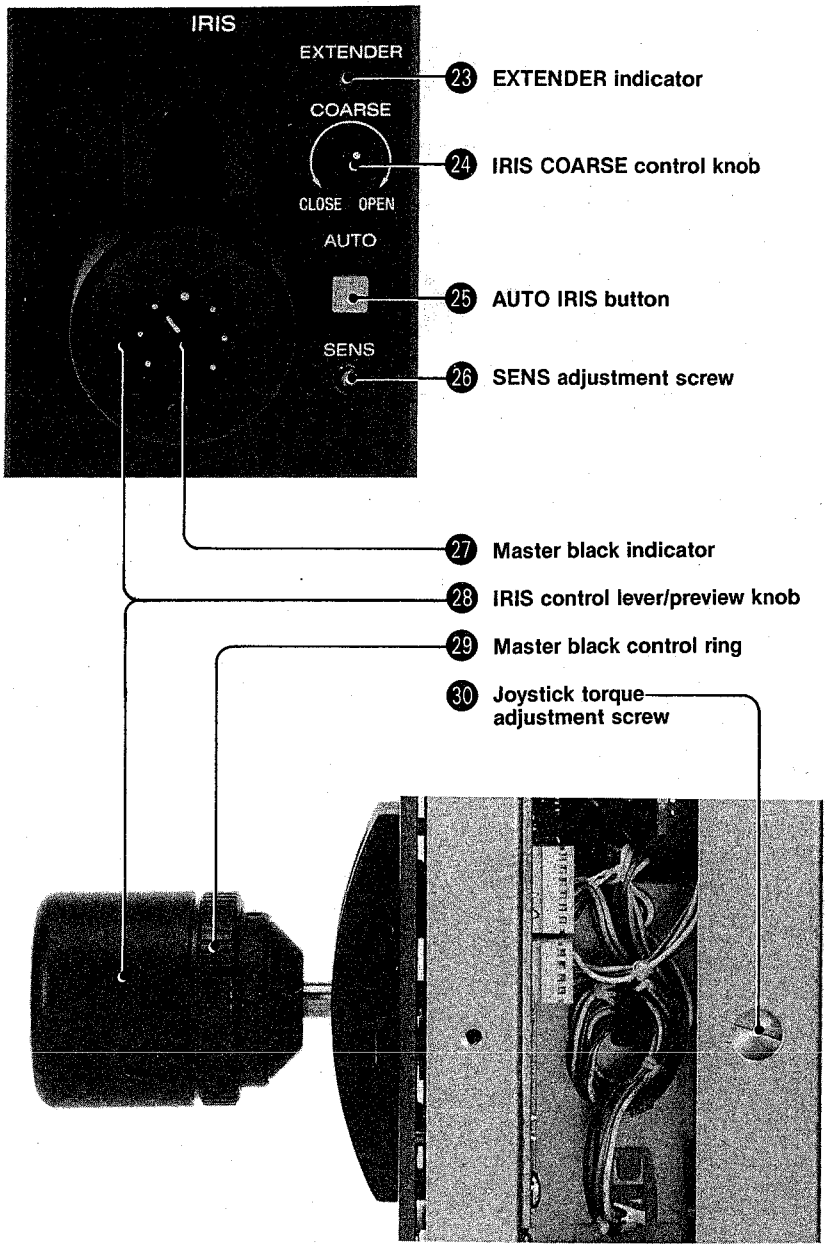


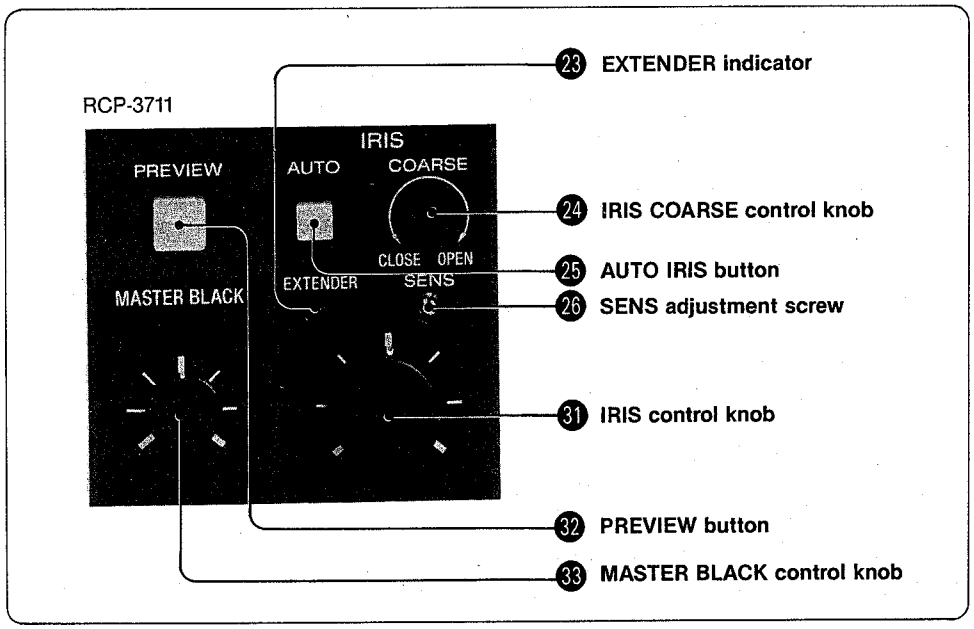
21 WHITE control knobs
Used to manually adjust the white balance in painting for example, after automatic white balance adjustment.
The left-hand knob is for R-signal adjustment and the right-hand one is for B-signal adjustment. A click stop is provided for the central position of each of these knobs.

22 BLACK control knobs
Used to manually adjust the black balance in painting for example, after automatic black balance adjustment.
The left-hand knob is for R-signal adjustment and the right-hand one is for B-signal adjustment. A click stop is provided for the central position of each of these knobs.

1-2-9. Iris and Master Black Adjustment Block

RCP-3710





23 EXTENDER indicator (amber)
This indicator lights when the lens extender is used.

24 IRIS COARSE control knob
Used to coarsely adjust the iris.

25 AUTO IRIS button
When this button is pressed, it lights and the iris is automatically adjusted according to the amount of input light. As a result, the image brightness is adjusted to a standard level.
When the button is lit, the reference value for automatic iris adjustment can be changed in the range of ±1 F by moving the IRIS control lever 28 (for RCP-3710) or turning the IRIS control knob 31 (for RCP-3711). (The standard reference value for automatic iris adjustment is given at the central position of the lever or knob.) To exit from the automatic iris adjustment mode, press this button again. The light goes out and the IRIS control lever (or knob) becomes usable for manual iris adjustment.

26 SENS (sensitivity) adjustment screw
To set the range of manual iris adjustment to be performed using the IRIS control lever 28 (for RCP-3710) or knob 31 (for RCP-3711), adjust this screw with a screwdriver. Turning it clockwise increases adjustment sensitivity, decreasing the range or manual iris adjustment.

㉗ Master black indicator (for RCP-3710)
When the master black control ring ㉙ is turned, this indicator also turns, giving an approximate indication of the adjusted master black value.

㉘ IRIS control lever/preview knob (for RCP-3710)
While the AUTO IRIS button ㉕ is unlit, manual iris adjustment can be performed by moving this lever. (The central value and range of adjustment can be varied using the IRIS COARSE control knob ㉔ and the SENS adjustment screw ㉖, respectively.)
While the AUTO IRIS button ㉕ is lit, this lever enables the reference value for automatic iris adjustment to be changed in the range of ±1 F.
When this lever (knob) is pressed down in its axial direction, the key signal for preview is output from the PREVIEW connector (see 1-2-10.) and the picture signal from the camera under control of this panel is displayed on the monitor screen.

㉙ Master black control ring (for RCP-3710)
Used to manually adjust the master black. When this ring is turned, the master black indicator ㉗ also turns, giving an approximate indication of the adjusted master black value.

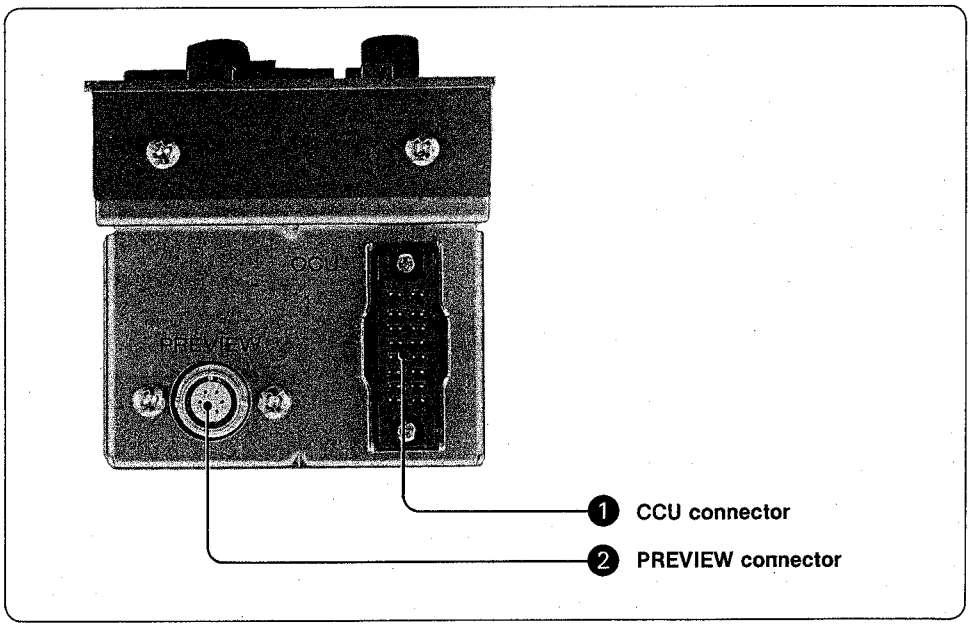
㉚ Joystick torque adjustment screw (for RCP-3710)
To adjust the torque required to move the IRIS control lever ㉘, turn this screw with a screwdriver. Turning it clockwise makes the lever harder to move.

㉛ IRIS control knob (for RCP-3711)
While the AUTO IRIS button ㉕ is unlit, this knob can be used to manually adjust the iris. The central value and range of adjustment can be varied using the IRIS COARSE control knob ㉔ and the SENS adjustment screw ㉖.
While the AUTO IRIS button ㉕ is lit, this knob can be used to vary the reference value for automatic iris adjustment in the range of ±1 F.

㉜ PREVIEW button (for RCP-3711)
When this button is pressed, it lights and the key signal for preview is output from the PREVIEW connector (see 1-2-10.) As a result, the picture signal from the camera under control of this panel is displayed on the monitor screen.

㉝ MASTER BLACK control knob (for RCP-3711)
Used to adjust the master black.

1-2-10. Connector Panel



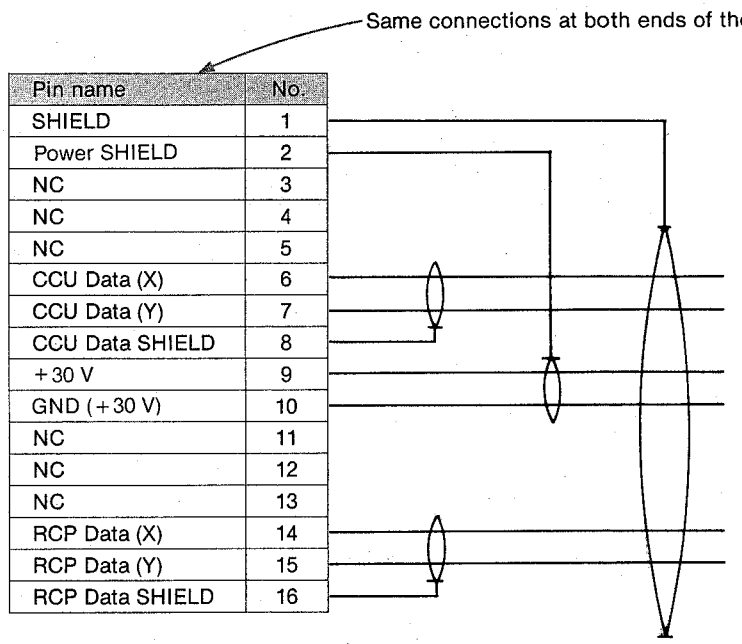
1 CCU connector (16-pin)
This connector provides the connections for power supply and control signals. Connect it to the RCP connector (16-pin) of the camera control unit. For details, see 1-3-1 "Connection to the CCU."

2 PREVIEW connector
In the case of the RCP-3710, this connector is used to transfer the PREVIEW knob on/off signal to an external video switcher or the like.
In the case of the RCP-3711, this connector is used to transfer the PREVIEW button on/off signal to an external video switcher or the like, and also to receive the power supply for button lighting from the video switcher or the like. For details, see 1-3-2 "PREVIEW connector."

1-3. Connections

1-3-1. Connection to the CCU

Connection of this remote control panel to the camera control unit can readily be made by using a CCA-2-30 camera connecting cable (not supplied), which is 30 m long.
A different cable can also be used provided that it is equivalent to a CCA-2 cable and that it is not longer than 200 m. When employing such a connection cable, make use of the supplied 16-pin connectors complying with the wiring diagram shown below.



Pin name	No.
SHIELD	1
Power SHIELD	2
NC	3
NC	4
NC	5
CCU Data (X)	6
CCU Data (Y)	7
CCU Data SHIELD	8
+30 V	9
GND (+30 V)	10
NC	11
NC	12
NC	13
RCP Data (X)	14
RCP Data (Y)	15
RCP Data SHIELD	16

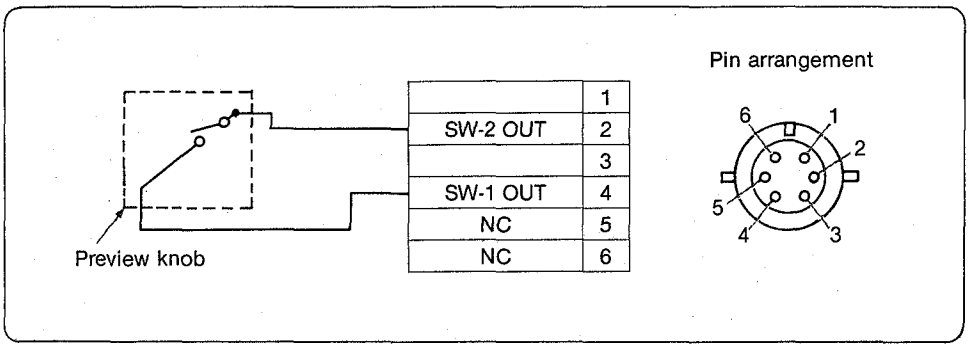
Cable consisting of three twisted-pairs of wire each protected with AWG-24 shield, and an outer shield

1-3-2. PREVIEW Connector

The PREVIEW connector is wired as shown below. It controls an external video switcher or the like.

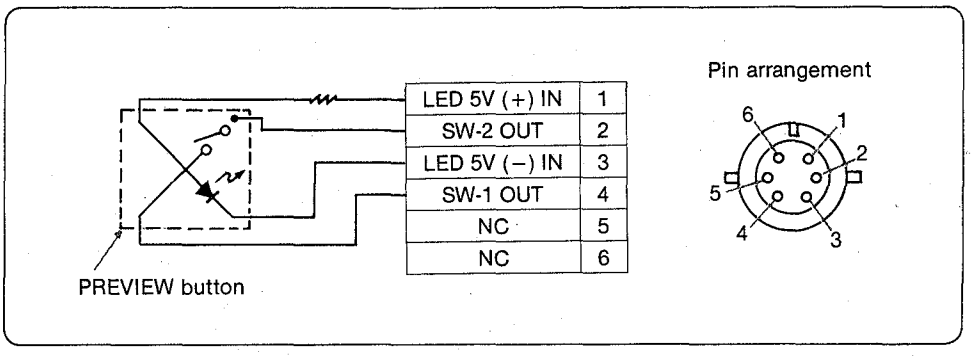
RCP-3710

The maximum current through the switch of the Preview knob is 1 mA.



RCP-3711

The power supply voltage for making the PREVIEW button light up is 5 V. The maximum current through the switch is 1 mA.



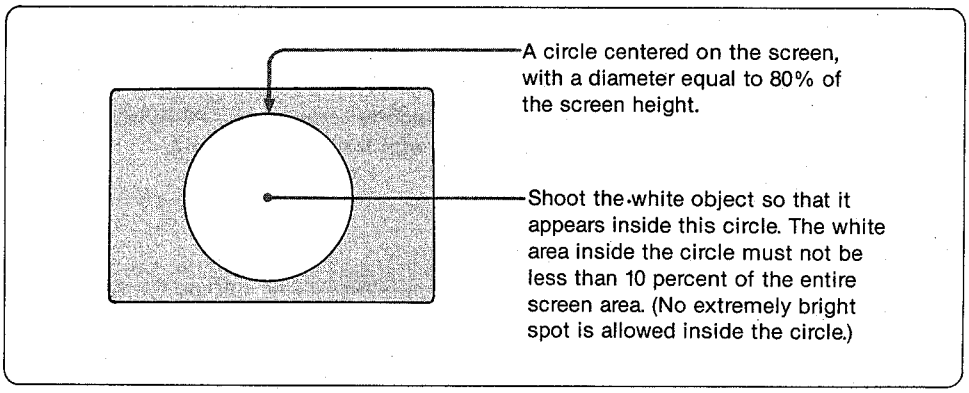
1-4. Operation

To make it possible to control your camera system from this panel, press the PANEL ACTIVE button on the panel to turn it on. Unless the PANEL ACTIVE button is lit, the camera system cannot be controlled from this panel.

1-4-1. Automatic Adjustment of White and Black Balance

To have the white and black balance automatically adjusted, proceed as follows:

1. Press the AUTO IRIS button. It lights and the iris enters the automatic adjustment mode.
2. Set all of the WHITE and BLACK control knobs to their central positions.*
3. Using the CC FILTER select buttons, select a color temperature conversion filter appropriate for the light source illuminating the subject.
4. If necessary, change the ND filter selection using the ND FILTER select buttons.
5. Shoot a white pattern. Something white (for example, white paper or wall) may be shot as a substitute.


A circle centered on the screen, with a diameter equal to 80% of the screen height.
Shoot the white object so that it appears inside this circle. The white area inside the circle must not be less than 10 percent of the entire screen area. (No extremely bright spot is allowed inside the circle.)

6. Press the AWB button. It lights and the white balance is automatically adjusted. When the adjustment is completed, the AWB button goes out.**
7. Press the ABB button. It lights and the black balance is automatically adjusted. When the adjustment is completed, the ABB button goes out.**

* Execution of automatic adjustment of white and black balance puts the WHITE and BLACK control knobs in the relative mode of operation. In the relative mode, that position of a knob which represents the reference value for manual adjustment (or painting), namely the automatically adjusted value, is the position where the knob was in at the time of the automatic adjustment. That is why it is recommended to execute step 2.
When the knob in the relative mode is turned to the end of its travel clockwise and then counterclockwise (the sequence may be reverse), it returns to the absolute mode, resulting in that its central position represents the central value of the adjustable range.

** If an error occurs during the adjustment, the button starts blinking. To stop it from blinking, press any button on this panel.

1-4-2. Iris Adjustment

While the AUTO IRIS button is lit, the iris is automatically controlled. With the AUTO IRIS button being unlit, the iris can be manually adjusted as required.

Automatic Adjustment

1 Set the IRIS control lever (RCP-3710) or knob (RCP-3711) to its central position.

2 Press the AUTO IRIS button to turn it on.
The iris is adjusted to an appropriate value according to the amount of input light.
- When the AUTO IRIS button is on, the reference value for automatic iris adjustment can be changed in the range of ±1 F by moving the IRIS control lever or turning the IRIS control knob.

Manual Adjustment

Setting the adjustable range

1 If the AUTO IRIS button is lit, press it to turn it off.

2 Set the IRIS control lever (RCP-3710) or knob (RCP-3711) to its central position.

3 Using the IRIS COARSE control knob, determine the center of the adjustable range for the IRIS control lever or knob.

4 Fully move or turn the IRIS control lever or knob in both directions to make sure of the adjustable range. To narrow or widen the range, turn the SENS adjustment screw clockwise or counterclockwise with a screwdriver.

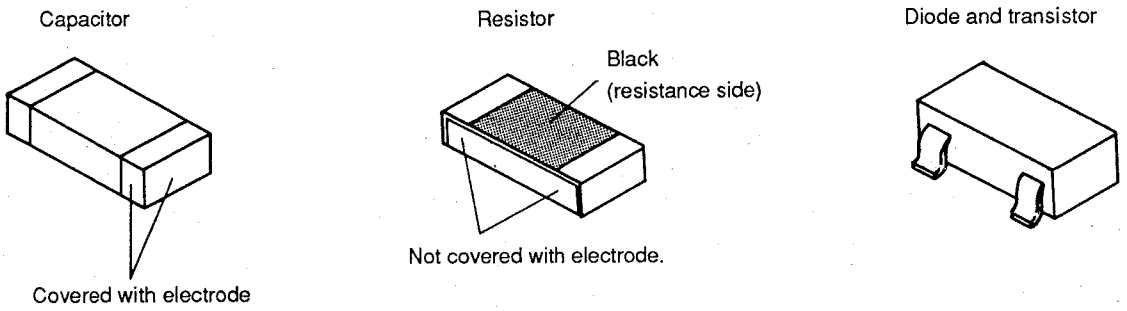
Adjustment
Move or turn the IRIS control lever or knob to adjust the iris so that a picture of desired characteristics is obtained.

1-5. Specifications

Connectors	CCU connector (16-pin) PREVIEW connector (6-pin)
Power supply	30 V DC
Power consumption	3 W
Maximum cable length	200 m (656 feet 5½ inches) (CCA-2 cable or equivalent)
Weight	RCP-3710: 1.0 kg (2 lb 3 oz) RCP-3711: 0.8 kg (1 lb 12 oz)
Dimensions (w/h/d, including projecting parts)	RCP-3710: 68 × 265 × 127 mm (2¾ × 10½ × 5 inches) RCP-3711: 68 × 265 × 84 mm (2¾ × 10½ × 3⅜ inches)
Supplied accessories	16-pin connectors (2) 6-pin connector (1) Number plate (1 set) Operation and maintenance manual (1)
Accessories not supplied	CCA-2-30 camera connecting cable

Design and specifications subject to change without notice.

3-2-4 Replacement of Chip Parts



Tools required

- Soldering iron of approx. 20W (Use a temperature controller, if possible, which can control the iron temperature to 270 ± 10°C.)
- Desoldering metal braid (Parts No. 7-641-300-81)
- Solder (A solder of 0.6mm in diameter is recommended.)
- Tweezers

Soldering conditions

- Iron temperature of 270 ± 10°C
- Soldering should be performed within two seconds.

Procedures

1. To remove a resistor or capacitor, place the tip of a soldering iron on chip parts to heat the parts, and then move it horizontally for removal while being desoldered. For removal of a diode or transistor, heat the one side, with two pins, of chip parts at the same time. Set the parts up when desoldered and remove two pins. And then remove the pin on another side.
2. Absorb solder by using a desoldering metal braid to smooth the land surface after removal.
3. Confirm by visual check that no trace is come off, no adjacent parts is damaged and no bridging occur.
4. Perform a thin pretinning on the trace.
5. Place new chip parts on the trace to solder its both sides.

Note: Do not reuse parts which have been removed.

For details, see CHIP COMPONENTS manual" (Parts No. 9-963-089-01) prepared by Sony Corporation.

3-2. NOTE ON MAINTENANCE SERVICES

3-2-1. PROM IC

Each PROM IC on the PC board has a suffix to its original designation. This suffix may change according to improvement of IC. Never use an IC having no suffix to its original designation, because its memory has not been programmed. Each PROM IC is mounted to the PC board via socket.

3-2-2. Note On Replacement Parts

1. Safety Related on Components Warning
   Components identified by shading marked with ⚠ on the schematic diagrams. exploded views and electrical spare parts list are critical to safe operation. Replace these components with Sony Parts whose parts numbers appear as shown in this manual or in service manual supplements published by Sony.

2. Standardization of Parts
   Replace Parts that are supplied from Sony Parts Center can sometimes have different shape and external appearance than what are actually used in equipment. This is due to "accommodating the improved parts and/or engineering changes" or "standardization of genuine parts."
   - This manual's exploded view and electrical spare parts lists are indicating the parts numbers of "the standardized genuine parts at present."
   - Regarding engineering parts and diagrams changes in our engineering department, refer Sony service bulletins and service manual supplements.

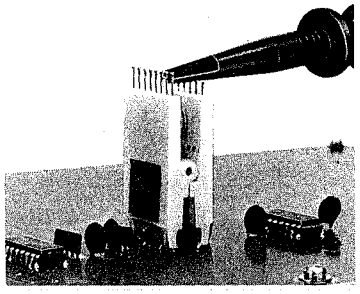
3. Stocked of Parts
   The parts marked with "S" in the SP column of the exploded views and electrical spare parts list are normally required for routine service work. Order for parts marked with "O" will be proceed, but allow for additional delivery time.

4. Units of Capacitors. Inductors, and Resistors
   The following units are omitted in the schematic diagrams, exploded views, and electrical parts lists unless otherwise specified;
   Capacitor : μF
   Inductor : μH
   Resistor : Ω

3-2-3. Fixture

IC Test Clip

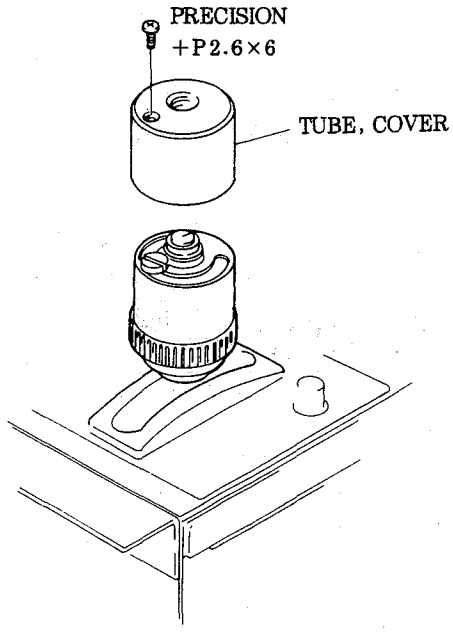
TC-16 Sony Parts No. J-6041-770-A
TC-16 Sony Parts No. J-6041-780-A



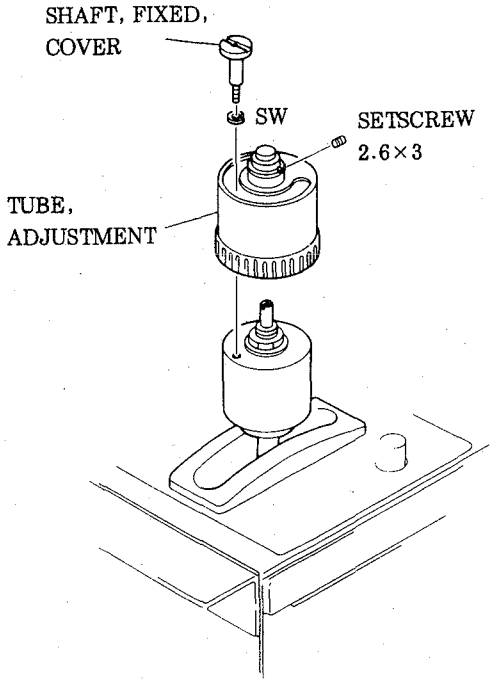
This clip is convenient for contacting an oscilloscope probe with each leg of DIP type IC when the IC is checked and adjusted.

3-1-2. Replacement of Joystick Control (only for RCP-3710)

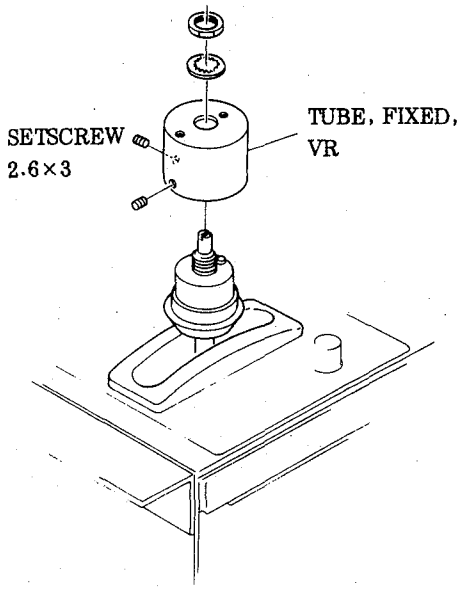
1 Remove the screw (PRECISION +P2.6×6) and remove COVER TUBE.



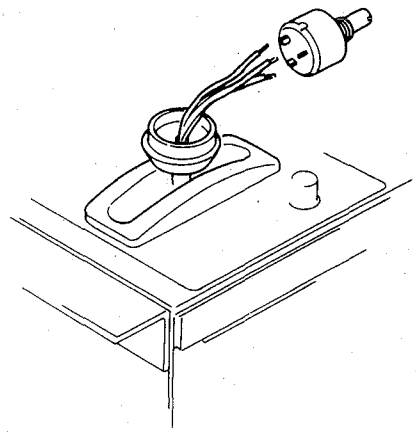
2 Unscrew COVER FIXED SHAFT. Remove the setscrew (2.6×3) and remove ADJUSTMENT TUBE.



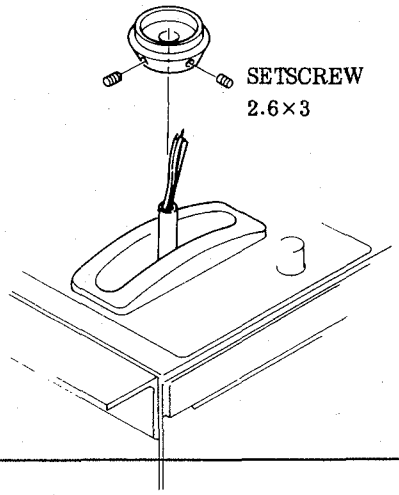
3 Remove the nut securing the control and remove the setscrew (2.6×3). VR FIXED TUBE will be removed.



4 Desolder harness connected to the control.



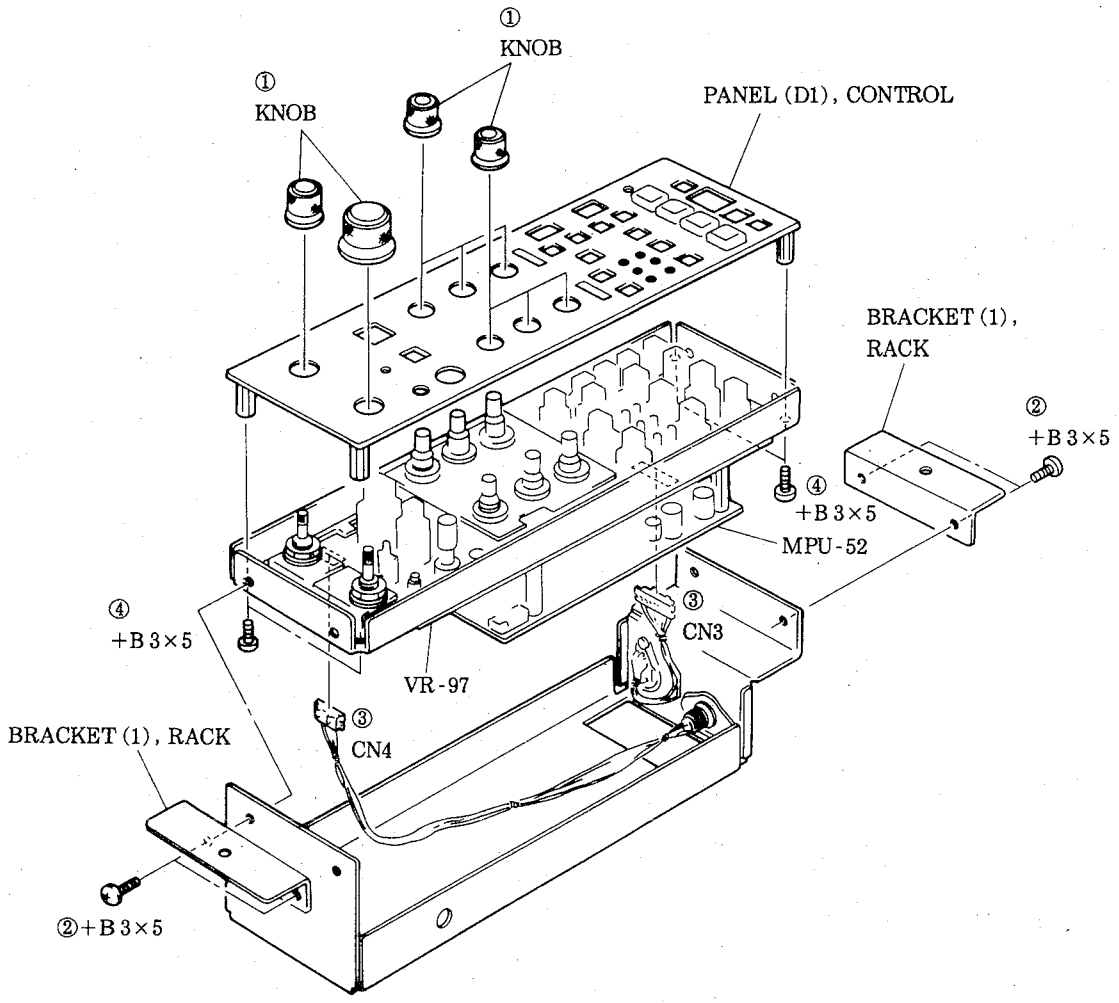
5 When removing CONTROL PANEL (J1), remove two setscrews (2.6×3) and remove LEVER FIXED TUBE.



6 When mounting a new control, reverse the procedures for removal.

[RCP-3711]

① Remove eight knobs.
② Remove two screws (+B3×5) and remove RACK BRACKET (1) respectively.
③ Disconnect two connectors, CN4 on the VR-97 board and CN3 on the MPU-52 board.
④ Remove four screws (+B3×5) and remove CONTROL PANEL (D1).



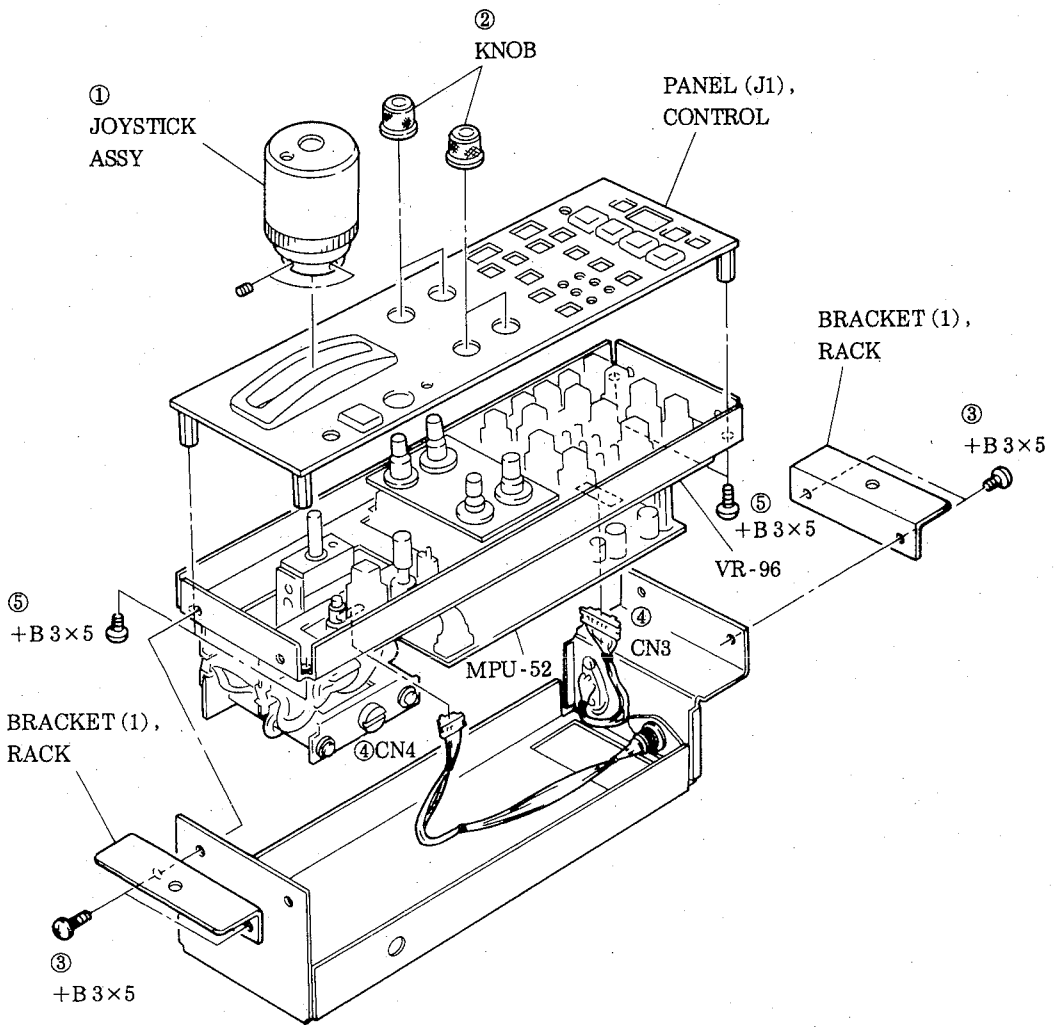
SECTION 3
SERVICE INFORMATION

3-1. REPLACEMENT OF MAIN PARTS

3-1-1. Cabinet Removal

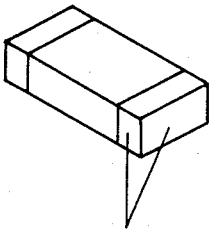
[RCP-3710]

① Remove JOYSTICK ASSY. For details, refer to Section 3-1-2. Replacement of Joystick control.
② Remove four knobs.
③ Remove two screws (+B3×5) and remove RACK BRACKET (1) respectively.
④ Disconnect two connectors, CN4 on the VR-96 board and CN3 on the MPU-52 board.
⑤ Remove four screws (+B3×5) and remove CONTROL PANEL (J1).



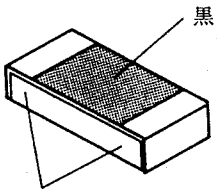
3-2-4. チップ部品交換時の注意事項

コンデンサー



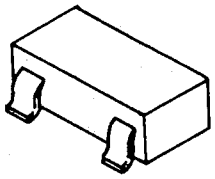
端を電極が覆っている

抵抗



側面に電極がない

ダイオード，トランジスタ



用意する治具：20 W程度の半田ゴテ（可能ならば，コテの温度が270°±10°Cにコントロールできる温度コントローラーを使用する。）
編組線（ソルダートール）
半田（0.6 mm径のものが望ましい）
ピンセット

半田付け条件：コテ温度270°±10°C
端子1か所を2秒以内に半田付けすること。

手順

1. 抵抗又はコンデンサーを外す場合は，半田ゴテの先をチップ部品の上にのせて部品を加熱し，半田が溶けた状態で横にずらして外します。
   ダイオード又はトランジスターの場合は，チップ部品の片側に足2本が出ている方を同時に加熱し，半田が溶けたら部品を上に起こして足2本を外します。次にもう片方の足を外すようにします。
2. 外した後，ランド表面を平らにするために，編組線を使って半田を吸い取って下さい。
3. 取り外した部分のパターンはがれ，隣接半田付け部のダメージ，ブリッジなどがないことを目視にて確認します。
4. パターンにうすく予備半田します。
5. 新しいチップ部品をパターンにのせ両端を半田付けします

取り外したチップ部品は再度使用しないこと。

詳しくは，ソニー技術推進部発行の チップ・マニュアル
ソニー部品番号9-963-089-01を参照して下さい。

3-2. サービス上の注意事項

3-2-1. PROM IC

PROM ICにはオリジナル品名の末尾にそのプログラムの名称が記載されています。
又，バージョン変更された場合，この末尾の名称が変わります。オリジナル品名のみ（プログラム化されていない）は絶対に使用しないこと。
尚，各基板に使われているICは全てソケット化しています。

3-2-2. 補修用部品の注意事項

(1) 安全重要部品
回路図，分解図，電気部品表中，⚠印および▒で囲まれた部品は安全性を維持するために重要な部品です。従って，これらの部品を交換するには必ず指定の部品と交換して下さい。

(2) 部品の共通化
ソニーから供給される部品はセットに実装されているものと異なることがあります。これは部品の共通化，改良等によるものです。分解図や電気部品表中には現時点での共通化された部品が記載されています。

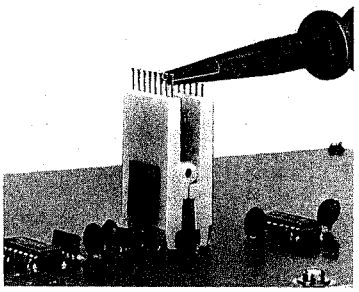
(3) 部品在庫
分解図，電気部品表中，SP欄がSで示されている部品は常時在庫しています。
SP欄が“O”で示されている部品は交換頻度が低い部品であるので在庫しないことがあり，納期が長くなることがあります。

(4) コンデンサ，インダクタ，抵抗の単位
回路図，分解図，電気部品表中，特に明記したものを除き，下記の単位は省略されています。
コンデンサ：μF
インダクタ：μH
抵抗　　：Ω

3-2-3. 治工具

ICテストクリップ

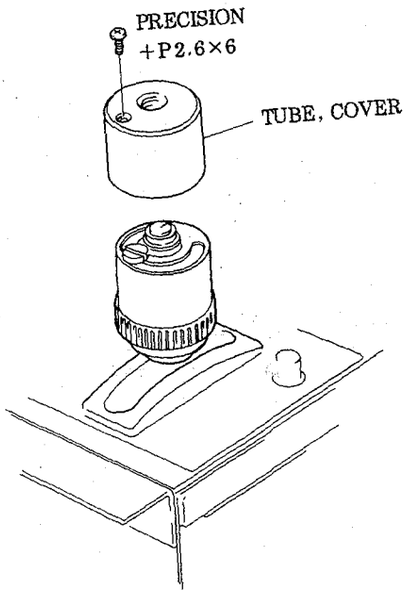
TC-16 ソニー部品番号J-6041-770-A
TC-20 ソニー部品番号J-6041-780-A



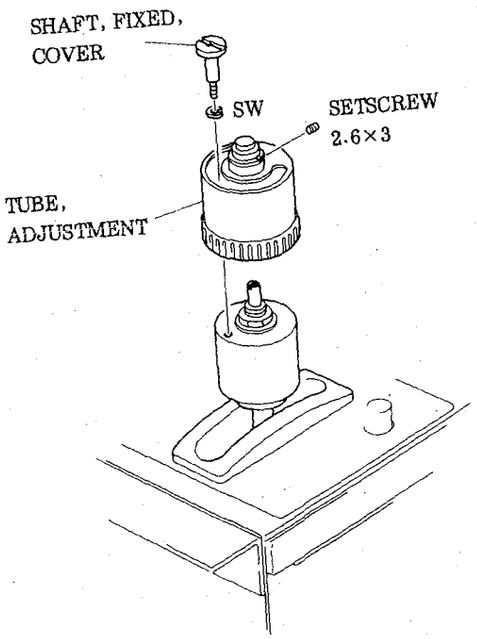
チェック，調整時にDIPタイプICの足にオシロスコープのプローブをかけるのに便利です。

3-1-2. ジョイスティックボリュームの交換方法 (RCP-3710のみ)

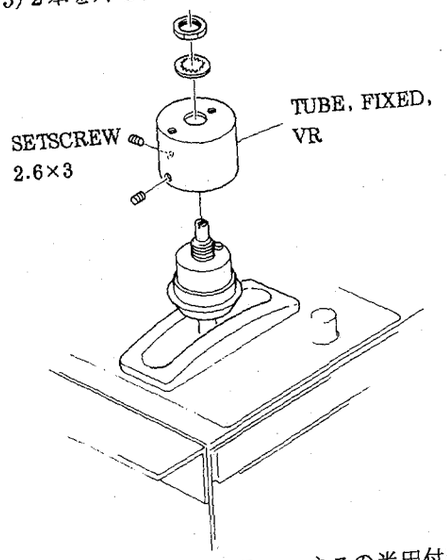
1. ねじ (PRECISION +P2.6×6) 1本を外し, COVER TUBEを外します。



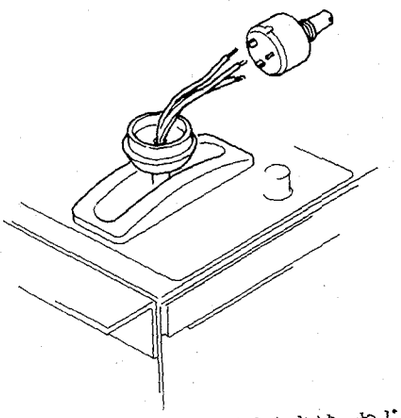
2. COVER FIXED SHAFFTを外します。ねじ (SETSCREW 2.6×3) 1本を外し, ADJUSTMENT TUBEを外します。



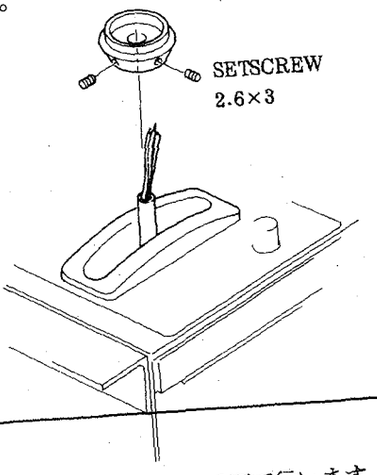
3. ボリュームを止めているナット及びねじ (SETSCREW 2.6×3) 2本を外し, VR FIXED TUBEを外します。



4. ボリュームに接続しているハーネスの半田付けを外します。



5. CONTROL PANEL (J1) を外すときは, ねじ (SETSCREW 2.6×3) 2本を外し, LEVER FIXED TUBEを外します。



6. 取り付けは, 取り外しと逆の手順で行います。

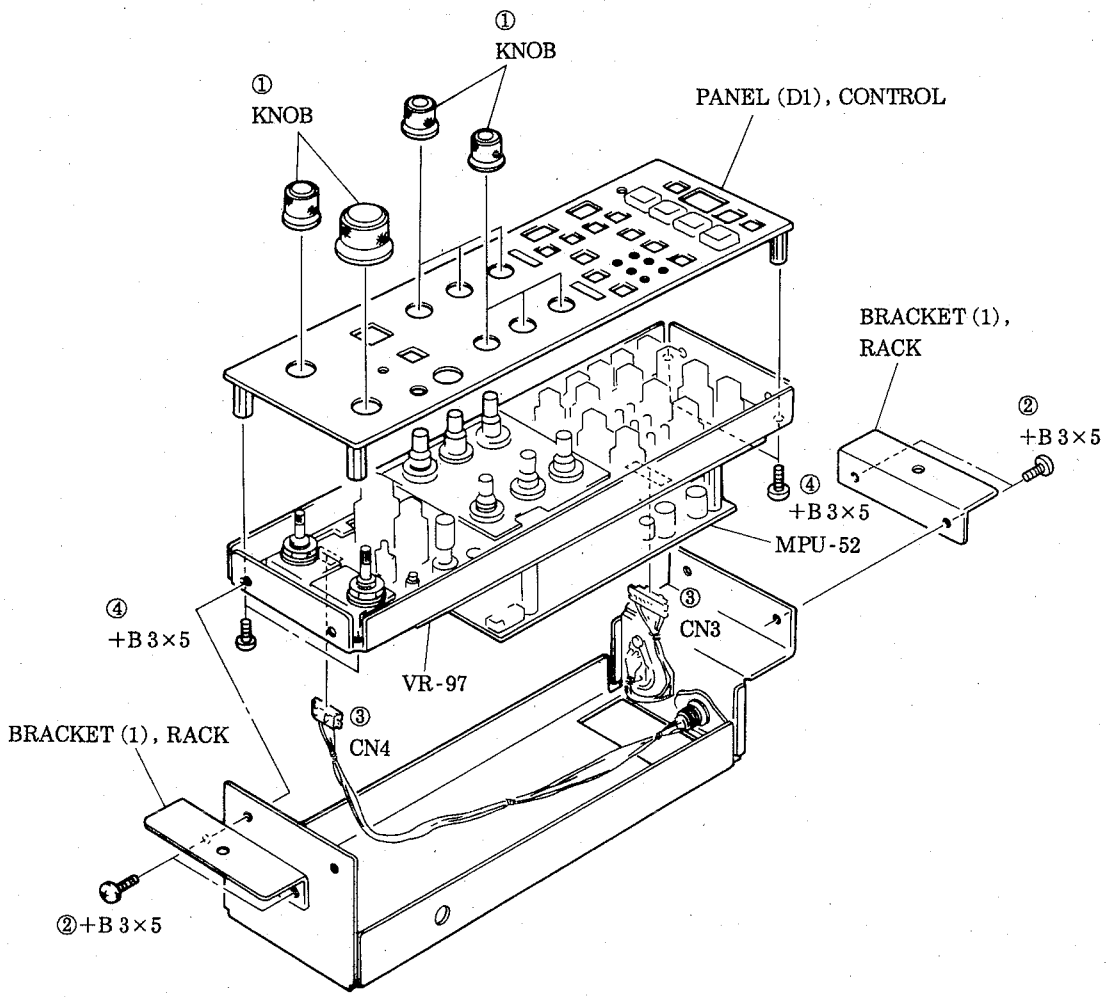
[RCP-3711]

①KNOBを8個外します。

②ねじ（+B 3×5）2本を外してRACK BRACKET (1) をそれぞれ外します。

③VR-97基板のコネクターCN4とMPU-52基板のCN3を外します。

④ねじ（+B 3×5）4本を外してCONTROL PANEL (D1) を外します。



第3章
サービスインフォメーション

3-1. 主要部品の交換方法

3-1-1. 外装の外し方

[RCP-3710]

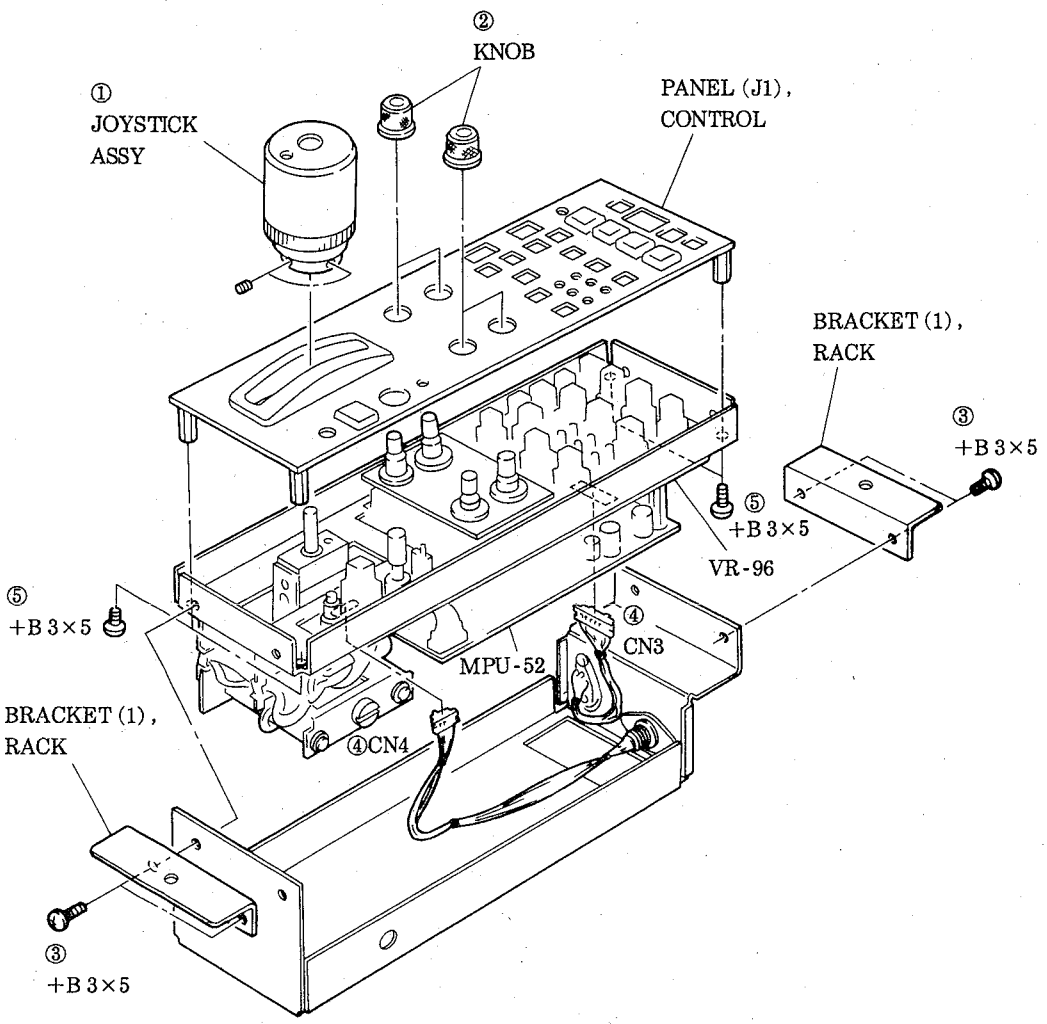
①ジョイスティックASSYを外します。詳しくは3-1-2. ジョイスティックボリュームの交換方法を参照して下さい。

②KNOBを4個外します。

③ねじ（+B 3×5）2本を外し，RACK BRACKET (1) をそれぞれ外します。

④VR-96基板のコネクターCN4とMPU-52基板のコネクターCN3を外します。

⑤ねじ（+B 3×5）4本を外し，CONTROL PANEL (J1) を外します。



2-6. SWITCH SETTING

MPU-52 Board

S1-1 (NTSC/PAL)

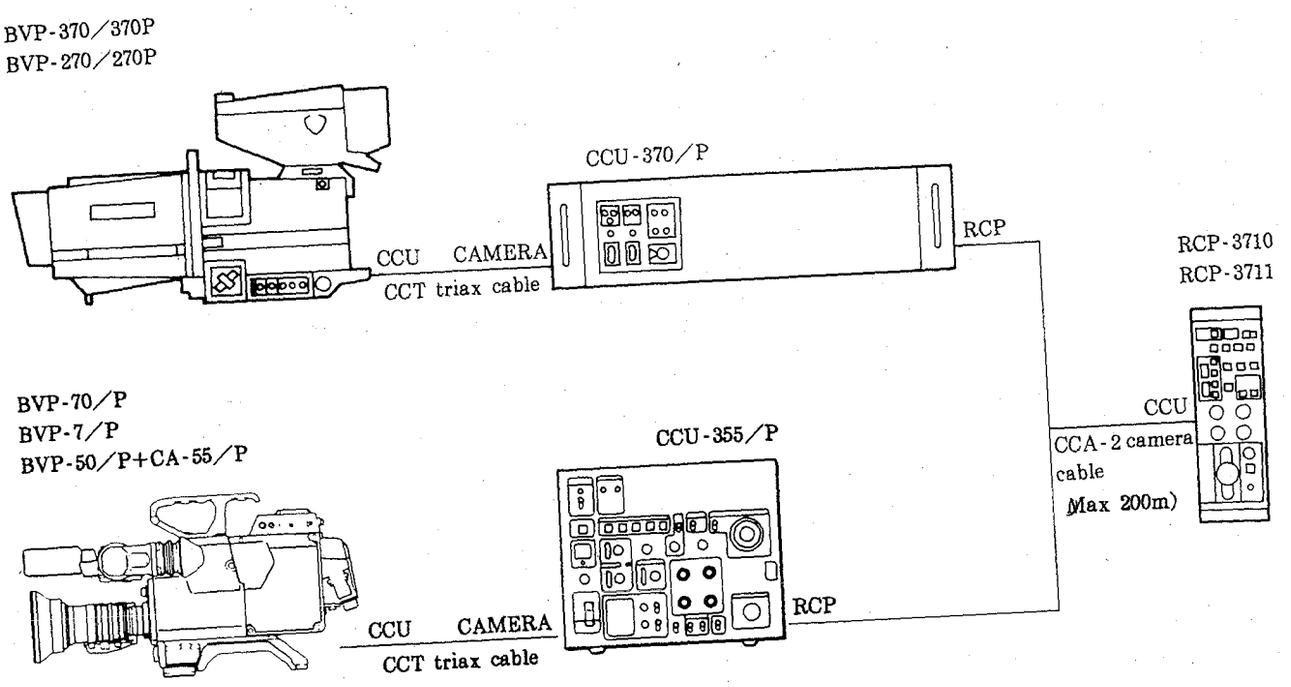
This switch selects the system, NTSC or PAL.

NTSC: OFF

PAL: ON

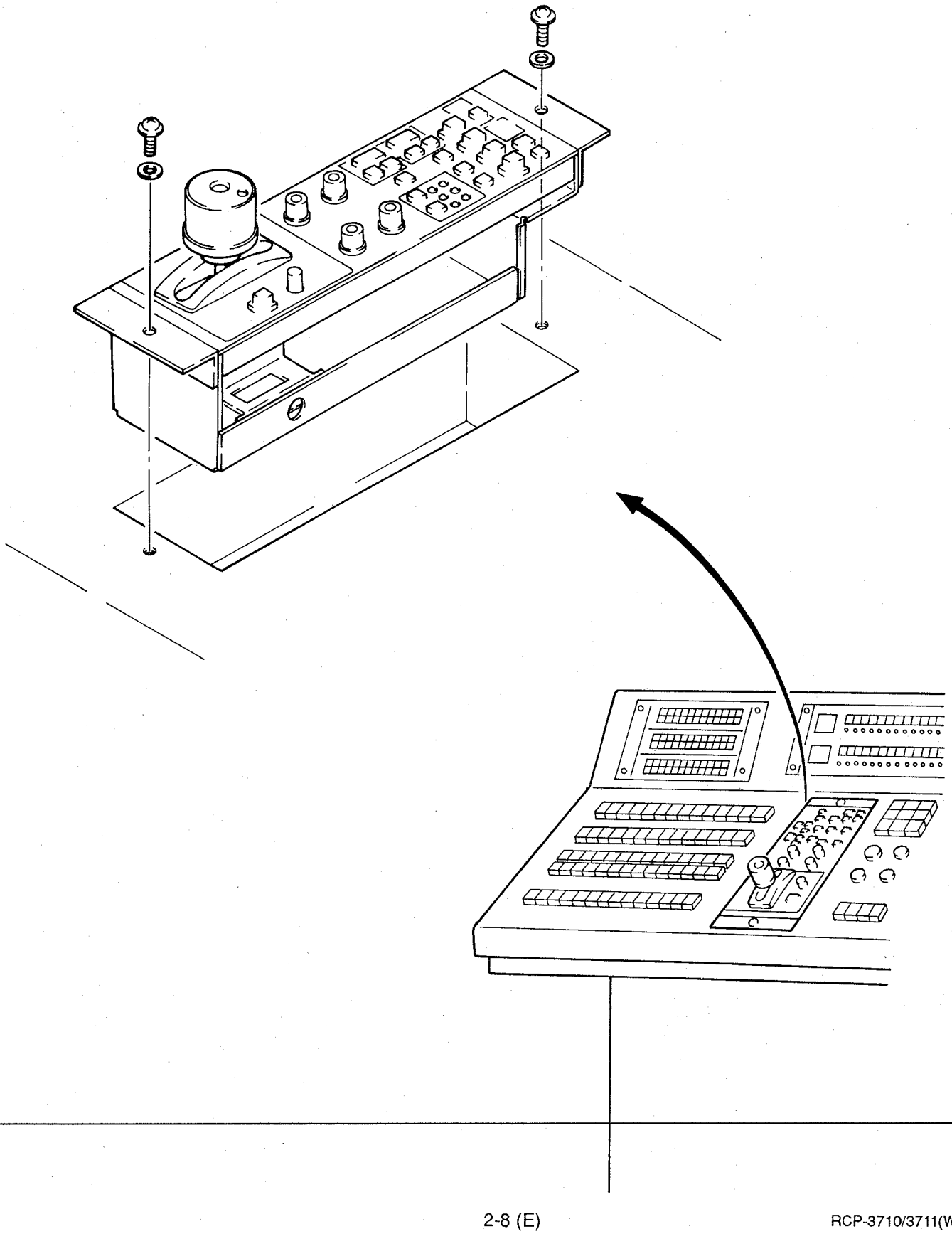
This switch is set to OFF at this factory. Therefore, when using in PAL system, set to "ON" position.

2-7. SYSTEM CONFIGURATION

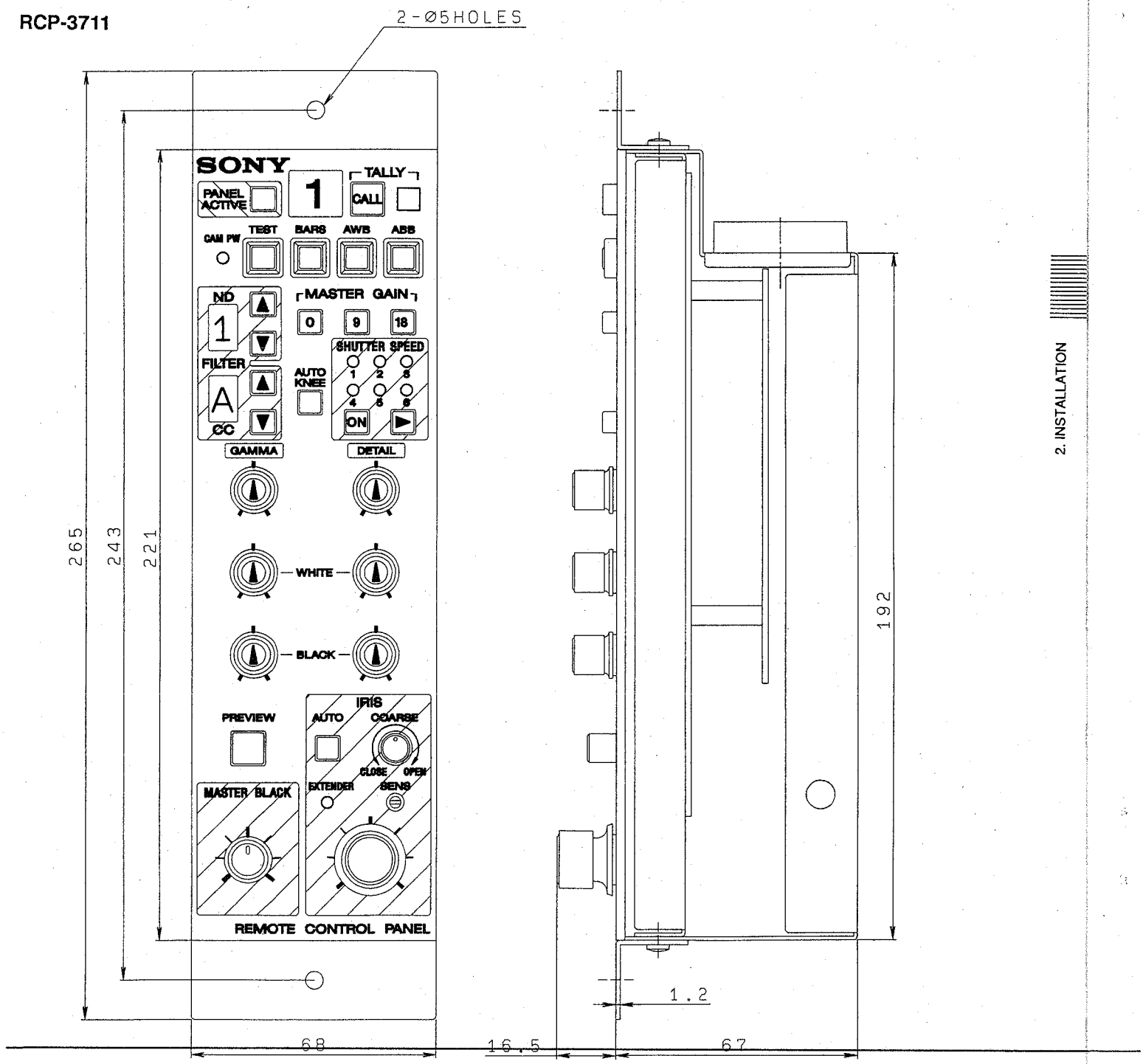


2-5-3. Installation to Console

RCP-3710/3711 can be installaed into the control console using the brackets which are supplied with product.



RCP-3711


2-Ø5HOLES
SONY
PANEL ACTIVE
1
TALLY
CALL
CAM PW
TEST
BARS
AWB
ABB
ND
1
FILTER
A
CC
MASTER GAIN
0
9
18
AUTO KNEE
SHUTTER SPEED
1
2
3
4
5
6
ON
GAMMA
DETAIL
WHITE
BLACK
PREVIEW
IRIS
AUTO
COARSE
CLOSE
OPEN
EXTENDER
SENS
MASTER BLACK
REMOTE CONTROL PANEL
265
243
221
192
68
16.5
67
1.2

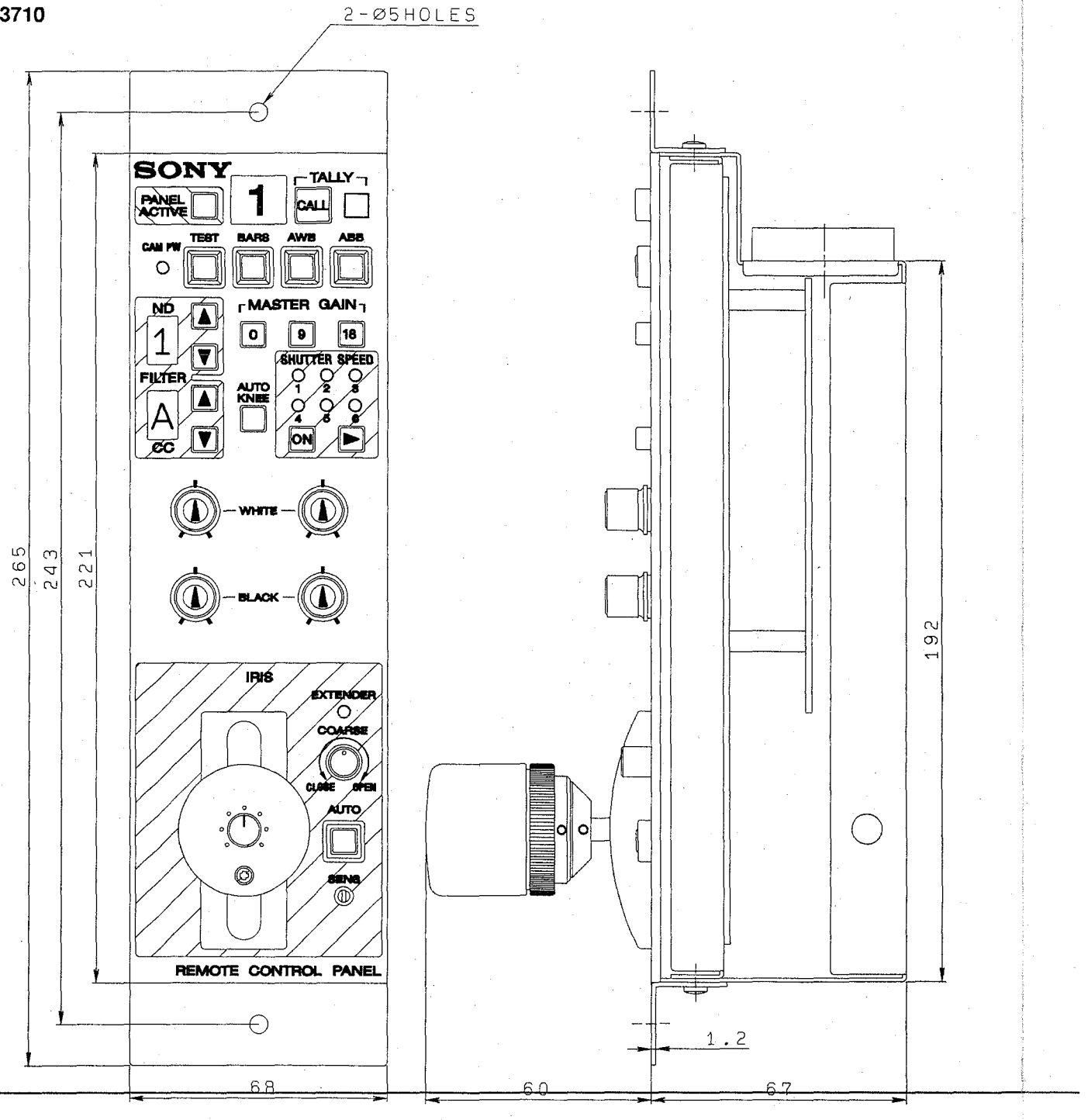
2-5. INSTALLATION SPACE

2-5-1. Installation Conditions

Provide a space of 7 cm or more behind the connector panel. (This prevents cable breakdown.)

2-5-2. Outside Dimensions (mm)

RCP-3710



2-4. OPERATING ENVIRONMENT

The set can be connected to the RCP connector of the camera control unit CCU-370 and installed into the control console. The set should be operated in the following environments.

- Operating temperature 0°C to +45°C
- Storage temperatune –25°C to +50°C
- Avoid exposing the set to rain or moisture.
- Avoid placing the set in hot places.
- Avoid placing the set near a heat source such as a power source.

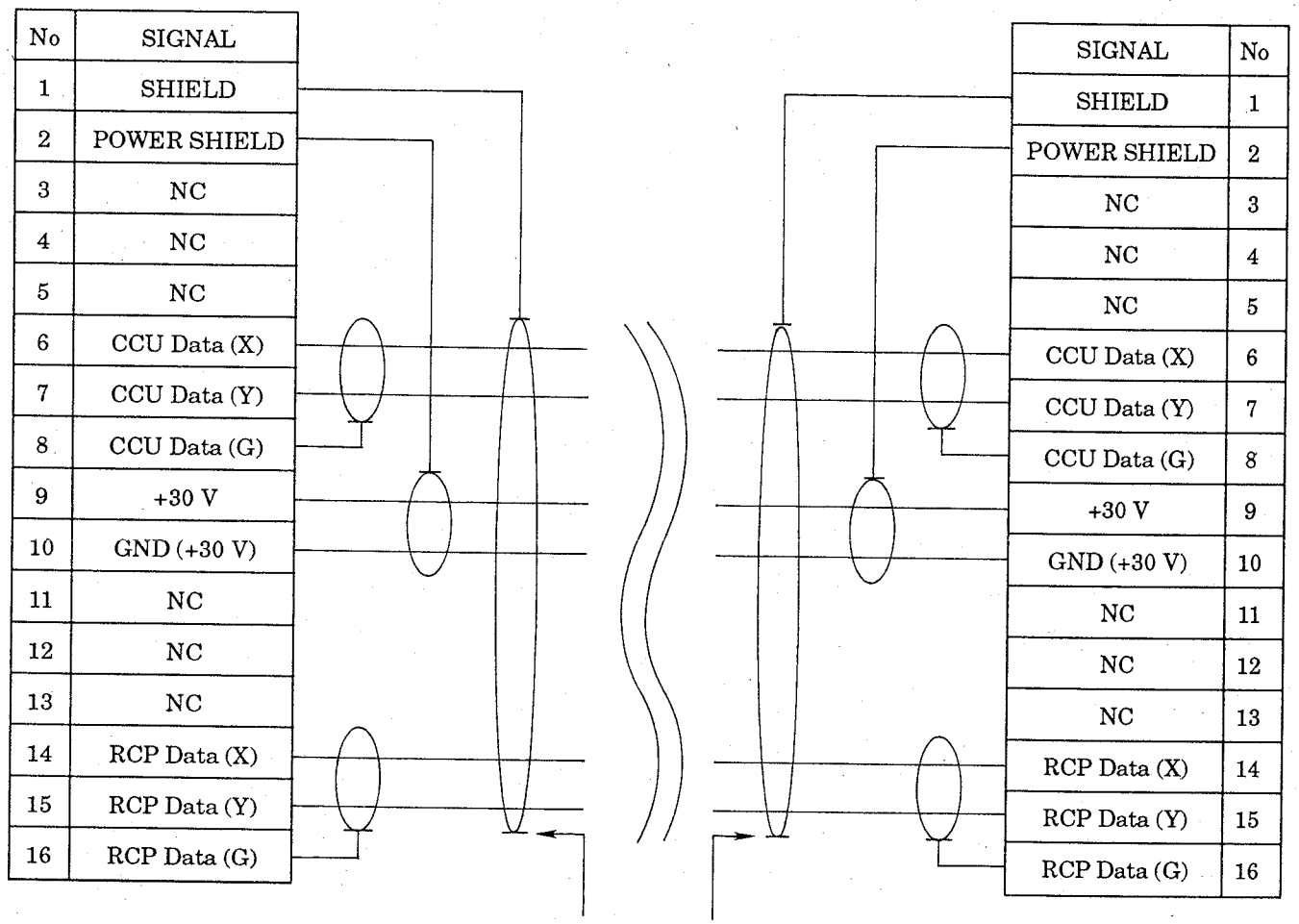
2-3-2. Connectors

When cable with connectors are set to the respective connectors on the connector panel during installation or service, the specified or equivalent connectors with cables, or the specified cable assemblies should be used, these are listed as follows;

Connector function	Parts No. and name of connector with cable
PREVIEW (6P, FEMALE)	1-560-691-11 PLUG, CONNECTOR 6P MALE
CCU (16P, FEMALE)	1-564-970-11 CONNECTOR, MULTI (SQUARE) 16P MALE or CABLE ASSEMBLY CCA-2-30 (200m) 16P

Connection between the CCU-370 and the remote control panel can be made with the CCA-2-30 camera connecting cable which is optionally available. Or, if you wish to use cable other than this, make use of the supplied 16-pin connectors by wiring them as shown in the diagram below. The maximum cable length should be 20 m.

- Make the same connections at both ends of the cable.



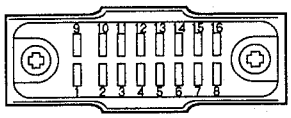
Cable should contain three twisted pairs, each surrounded by AWG-24 shielded wire. These, in turn, should be surrounded by outer shield.

2-3. CONNECTORS AND CABLES

2-3-1. Connector Input/Output Signals

The main connector Input/Output signals are as follows.

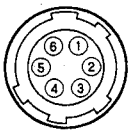
CCU (16-pin)



(EXT VIEW)

No	SIGNAL	REMARK FOR SIGNAL
1	SHIELD	GND
2	POWER SHIELD	GND
3	NC	
4	NC	
5	NC	
6	CCU Data (X)	CURRENT LOOP 18±3 mA
7	CCU Data (Y)	
8	CCU Data (G)	
9	+30 V	30 V, 300 mA
10	GND (+30 V)	
11	NC	
12	NC	
13	NC	
14	RCP Data (X)	
15	RCP Data (Y)	CURRENT LOOP 18±3 mA
16	RCP Data (G)	

PREVIEW (6-pin)

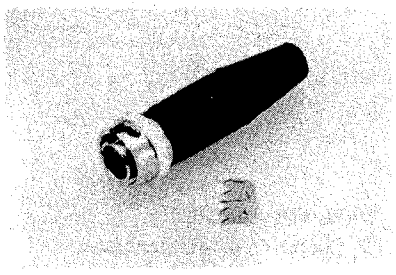


(EXT VIEW)

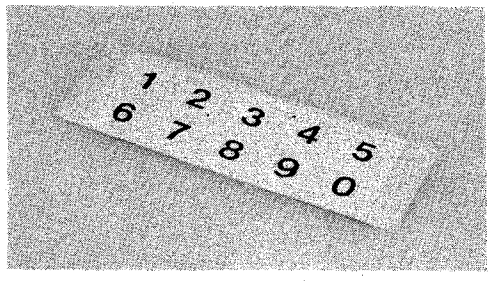
No	SIGNAL	REMARK FOR SIGNAL
1	NC	
2	SW – 2 OUT	0.1 mA DC = 30 V
3	NC	
4	SW – 1 OUT	0.1 mA DC = 30 V
5	NC	
6	NC	

2-2. SUPPLED ACCESSORES

- Preview connector (6-pin) × 1
  Transmits the PREVIEW button ON/OFF signal to the switcher.

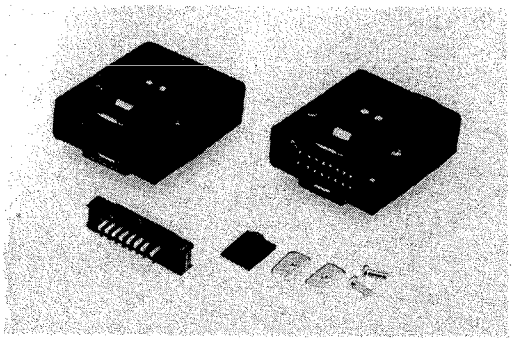


- Number plate × 1



- Operation and Maintenance manual × 1

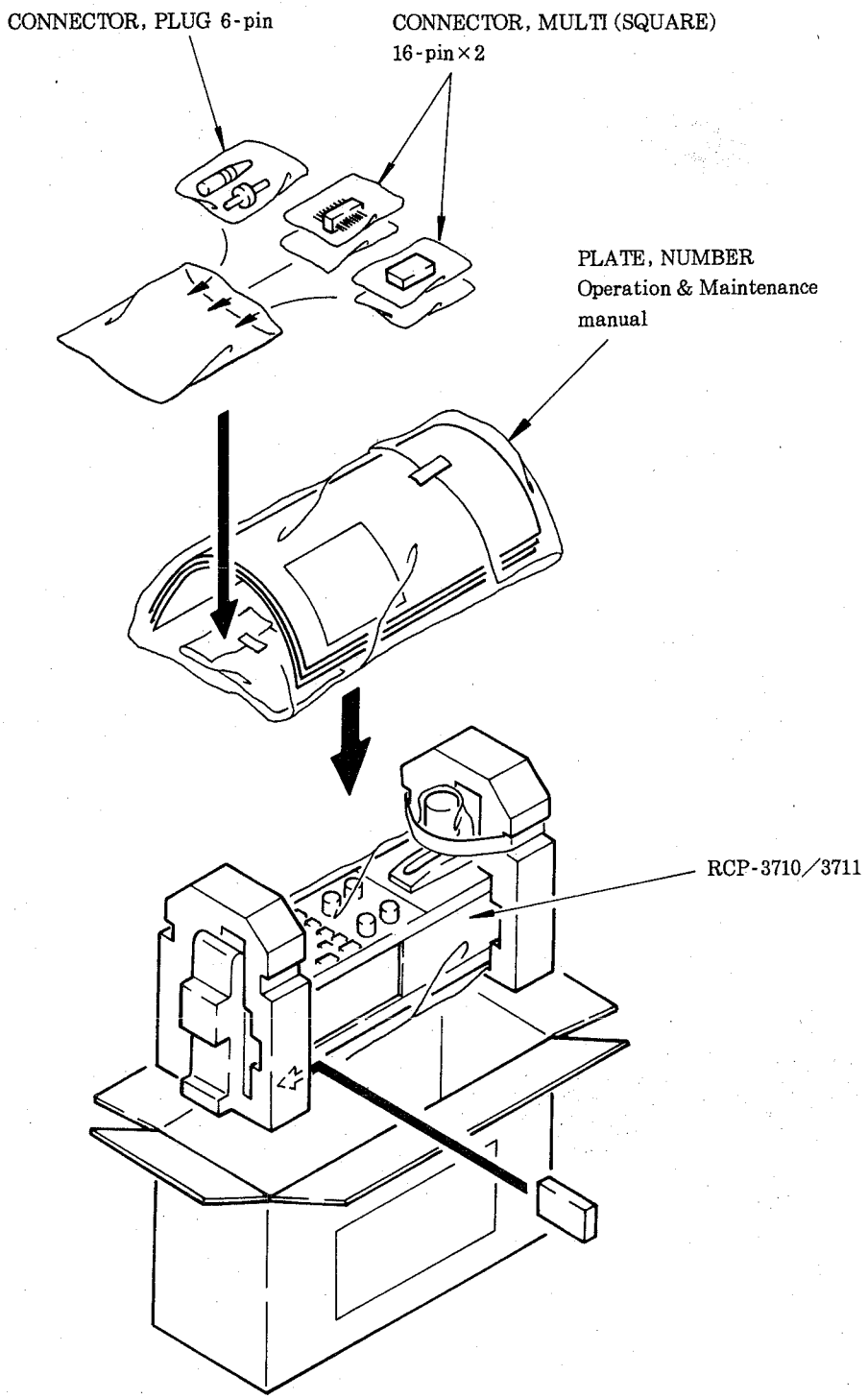
- CCU Connector (16-pin) × 2
  Connects to the RCP connector of the CCU-360, and provides connections for power supply and control signals.



Note: Camera connection cable CCA-2-30 (with 16-pin connector) is an optional accessory.

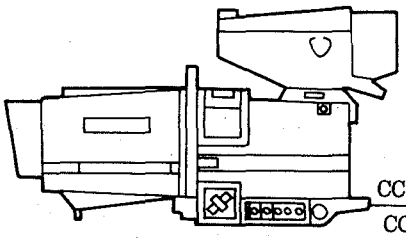
SECTION 2
INSTALLATION

2-1. PACKING AND UNPACKING



2-6. システム接続

BVP-370／370P
BVP-270／270P



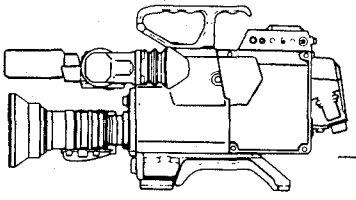
CCU-370／P

CCU CAMERA
CCT triax cable

RCP

RCP-3710
RCP-3711

BVP-70／P
BVP-7／P
BVP-50／P+CA-55／P



CCU-355／P

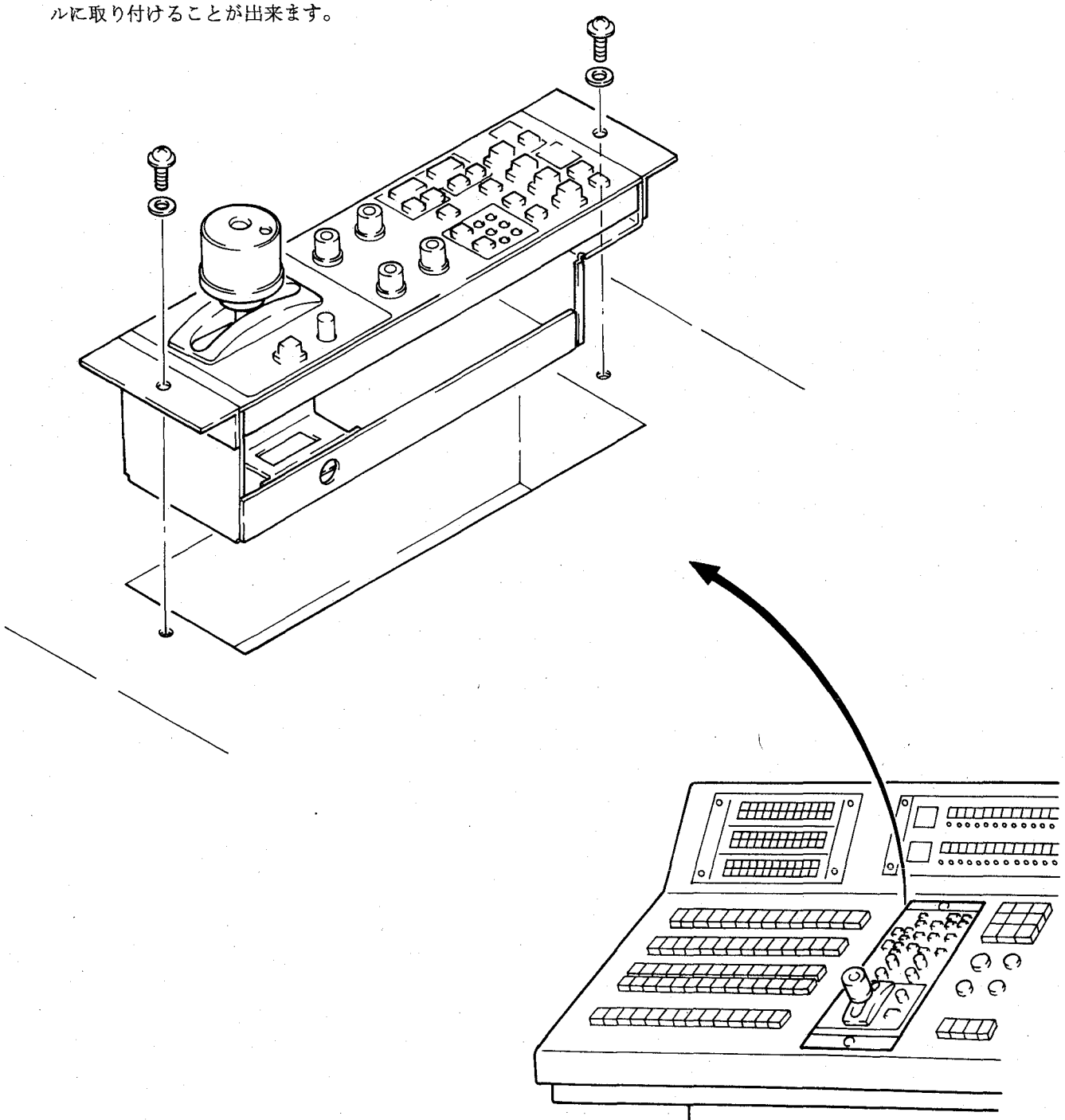
CCU CAMERA
CCT triax cable

RCP

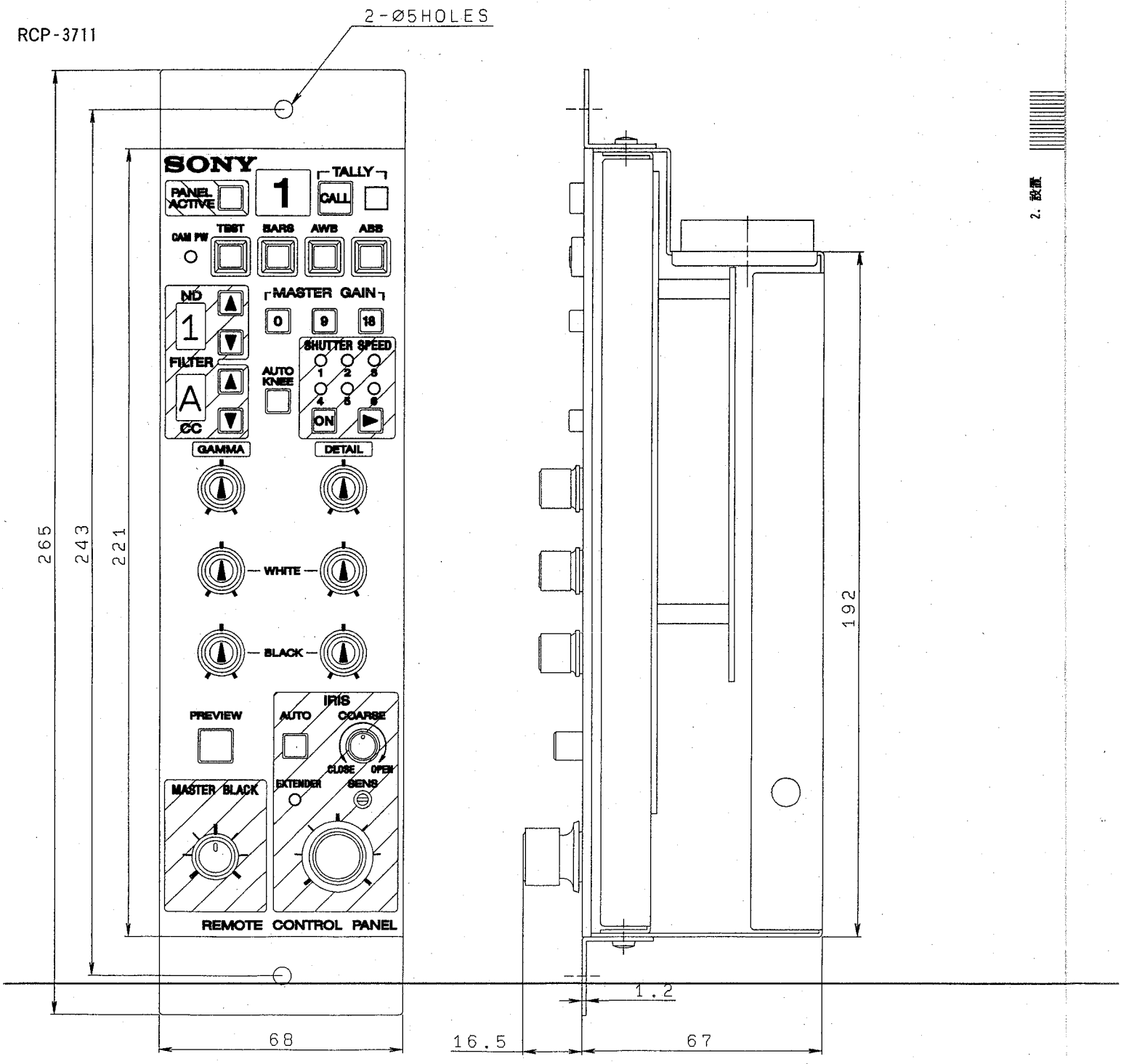
CCU
CCA-2 camera cable
(Max 200m)

2-5-3. コンソールへの取り付け方法

RCP-3710／3711を付属の取り付け金具を用いてコンソールに取り付けることが出来ます。



RCP-3711


2-Ø5HOLES
SONY
PANEL ACTIVE
1
TALLY
CALL
CAM PW
TEST
BARS
AWB
ABB
ND
1
FILTER
A
CC
AUTO KNEE
MASTER GAIN
0
9
18
SHUTTER SPEED
1
2
3
4
5
6
ON
GAMMA
DETAIL
WHITE
BLACK
PREVIEW
IRIS
AUTO
COARSE
CLOSE
OPEN
EXTENDER
SENS
MASTER BLACK
REMOTE CONTROL PANEL
265
243
221
192
68
16.5
67
1.2

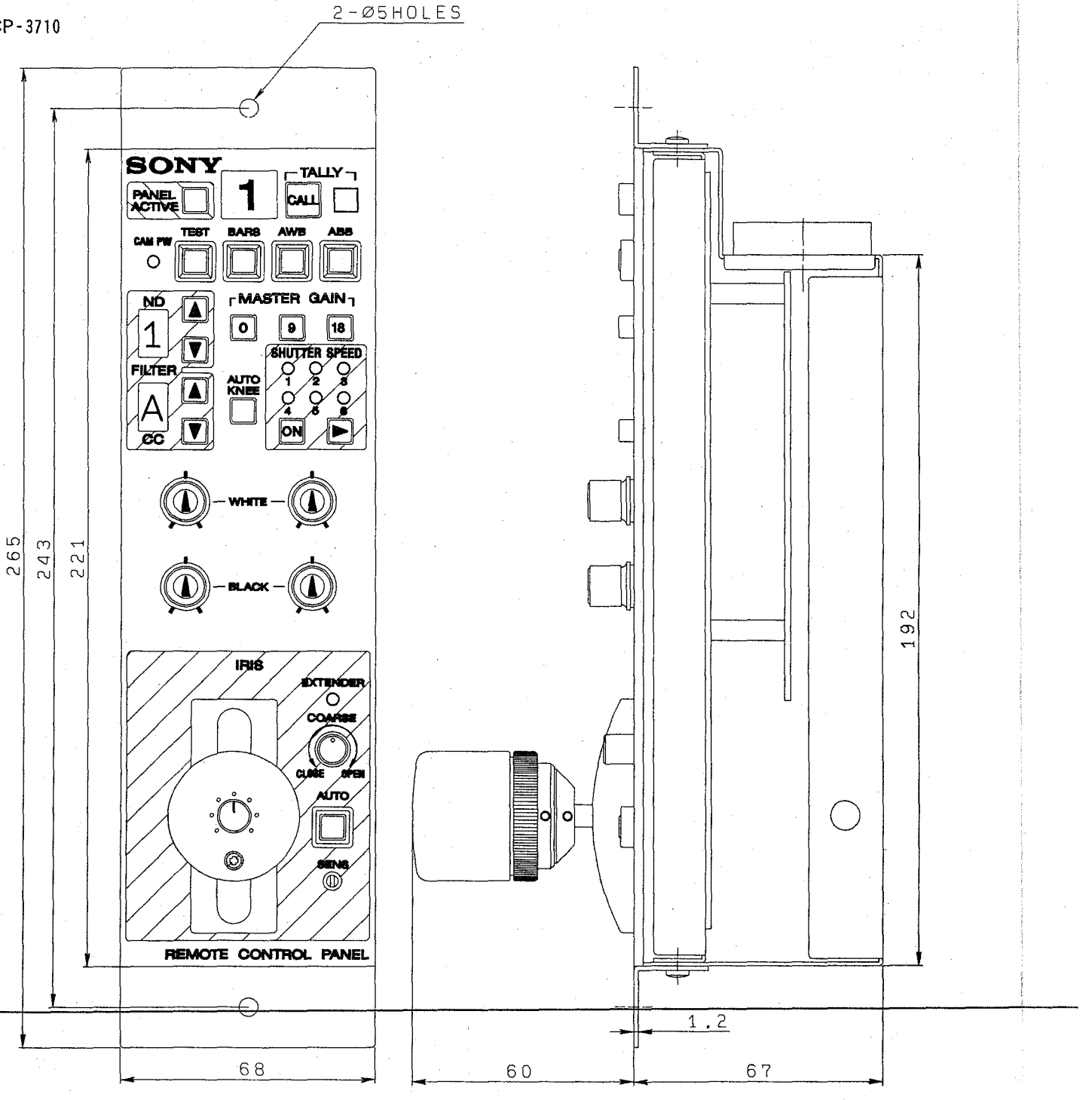
2-5. 設置スペース

2-5-1. 設置条件

• コネクターパネルの後方に約7 cm以上の空間を設けること。
（ケーブルの損傷を防ぎます。）

2-5-2. 外形寸法　（単位 mm）

RCP-3710



2-4. 設置使用環境

本機は，カメラコントロールユニットCCU-370のRCPコネクターに接続し，調整卓に組み込んで使うことができます。
その際下記の環境内での使用に適応します。

- 動作周囲温度　0°C～45°C
- 保存温度　−25°C～＋50°C
- 湿度　結露状態に置かないこと。
- 高温の部屋や熱源の近くは避けること。
- 電源などの発熱体の上に置かないこと。

2-3-2. 接続コネクター

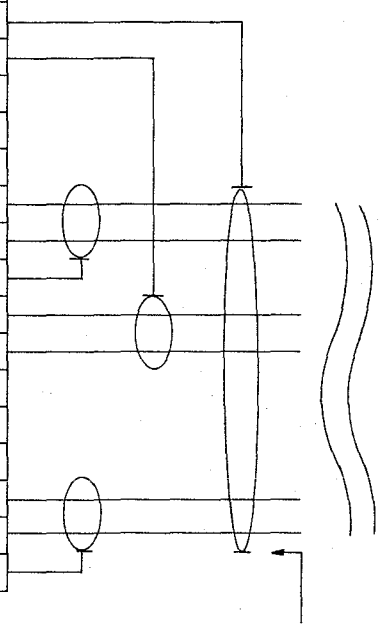
設置時，サービス時等において，コネクターパネル部の各種コネクターにケーブルを接続する際には，その先端に次に記するコネクター又は，同等品を使用して下さい。

コネクター機能名称	接続するケーブル側のコネクターの部品番号および名称
PREVIEW (6P, FEMALE)	1-560-691-11 PLUG, CONNECTOR 6P MALE
CCU (16P, FEMALE)	1-564-970-11 CONNECTOR, MULTI (SQUARE) 16P MALE or CABLE ASSEMBLY CCA-2-30 (200 m) 16P

CCU-370と本パネルは，別売りのカメラ接続ケーブルCCA-2-30を使用します。これ以外のケーブルをお使いになる時は付属の16ピンコネクターを使って，下図のように配線して下さい。ケーブルの最大長は200 mまでです。

※ケーブルの両端とも同じ接続

No	SIGNAL
1	SHIELD
2	POWER SHIELD
3	NC
4	NC
5	NC
6	CCU Data (X)
7	CCU Data (Y)
8	CCU Data (G)
9	+30 V
10	GND (+30 V)
11	NC
12	NC
13	NC
14	RCP Data (X)
15	RCP Data (Y)
16	RCP Data (G)



SIGNAL	No
SHIELD	1
POWER SHIELD	2
NC	3
NC	4
NC	5
CCU Data (X)	6
CCU Data (Y)	7
CCU Data (G)	8
+30 V	9
GND (+30 V)	10
NC	11
NC	12
NC	13
RCP Data (X)	14
RCP Data (Y)	15
RCP Data (G)	16

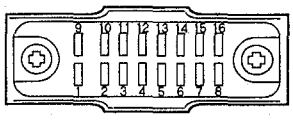
AWG-24シールド付
ツイストペアー線3組
外周シールド付ケーブル

2-3. 適合コネクター／ケーブル

2-3-1. コネクターの入出力信号

• コネクターの入出力信号は，次の通りです。

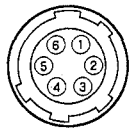
CCU (16 Pin)



(EXT VIEW)

No	SIGNAL	REMARK FOR SIGNAL
1	SHIELD	GND
2	POWER SHIELD	GND
3	NC	
4	NC	
5	NC	
6	CCU Data (X)	CURRENT LOOP 18±3 mA
7	CCU Data (Y)	
8	CCU Data (G)	
9	+30 V	30 V, 300 mA
10	GND (+30 V)	
11	NC	
12	NC	
13	NC	
14	RCP Data (X)	CURRENT LOOP 18±3 mA
15	RCP Data (Y)	
16	RCP Data (G)	

PREVIEW (6 Pin)

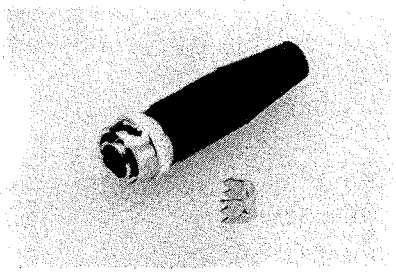


(EXT VIEW)

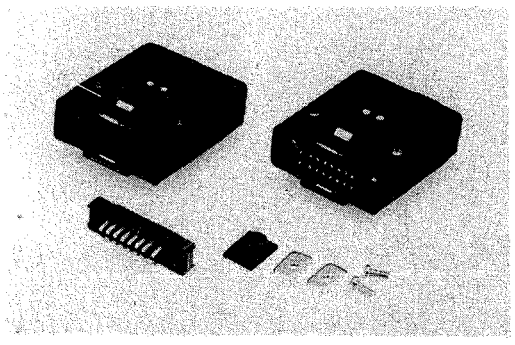
No	SIGNAL	REMARK FOR SIGNAL
1	NC	
2	SW-2 OUT	0.1 mA DC=30 V (抵抗負荷)
3	NC	
4	SW-1 OUT	0.1 mA DC=30 V (抵抗負荷)
5	NC	
6	NC	

2-2. 標準付属品

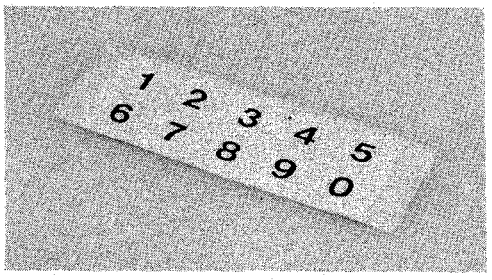
プレビューコネクター (6ピン): 1セット
PREVIEWボタンのON／OFFの信号をスイッチャーへ伝達します。



CCUコネクター (16ピン): 2セット
CCU-370のRCPコネクターに接続します。電源及びコントロール信号の受け渡しをします。



ナンバープレート: 1シート

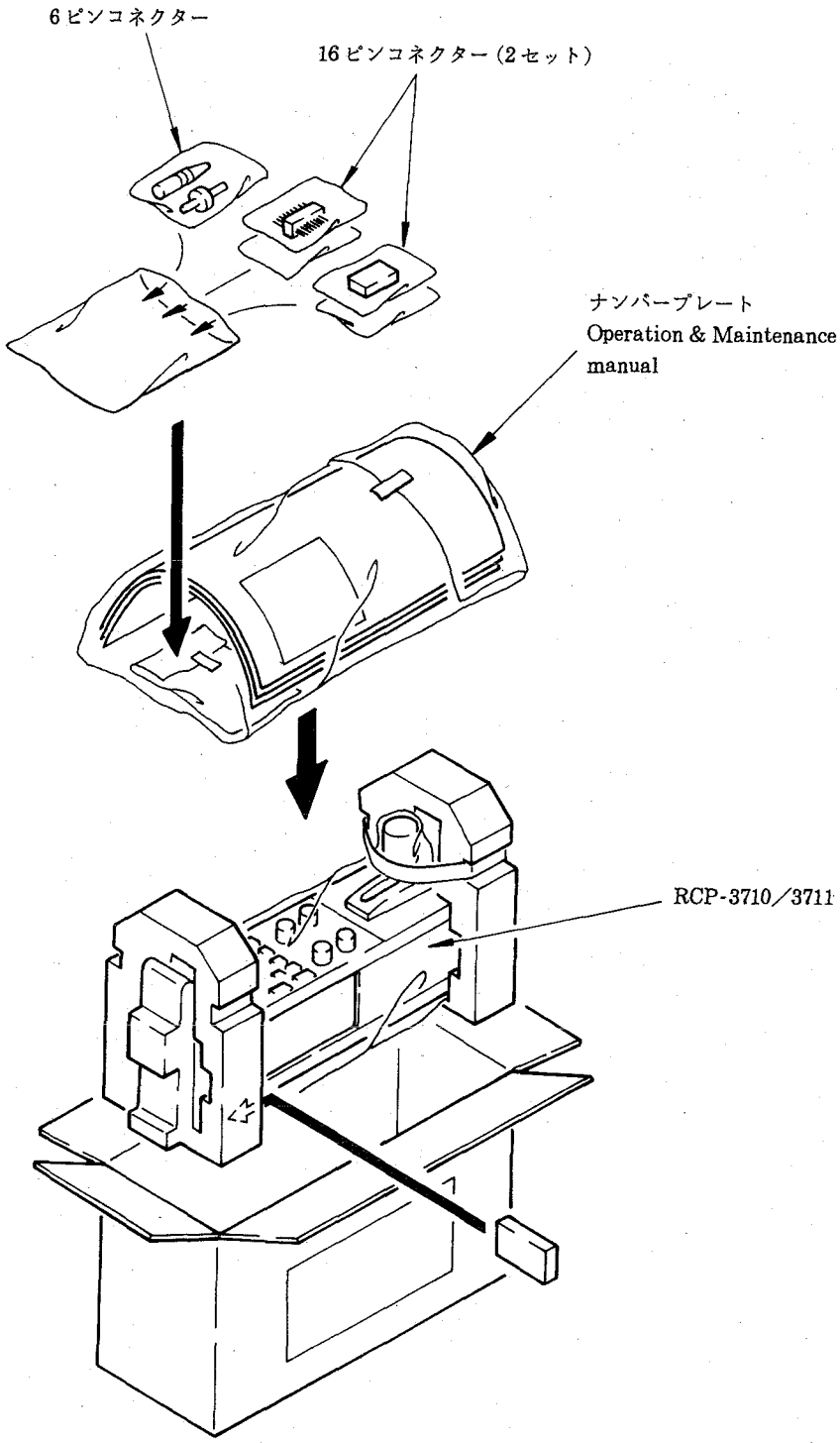


Operation & Maintenance manual: 1冊

注) カメラ接続ケーブルCCA-2-30 (16ピンコネクター付き) は, 別売りアクセサリーとなります。

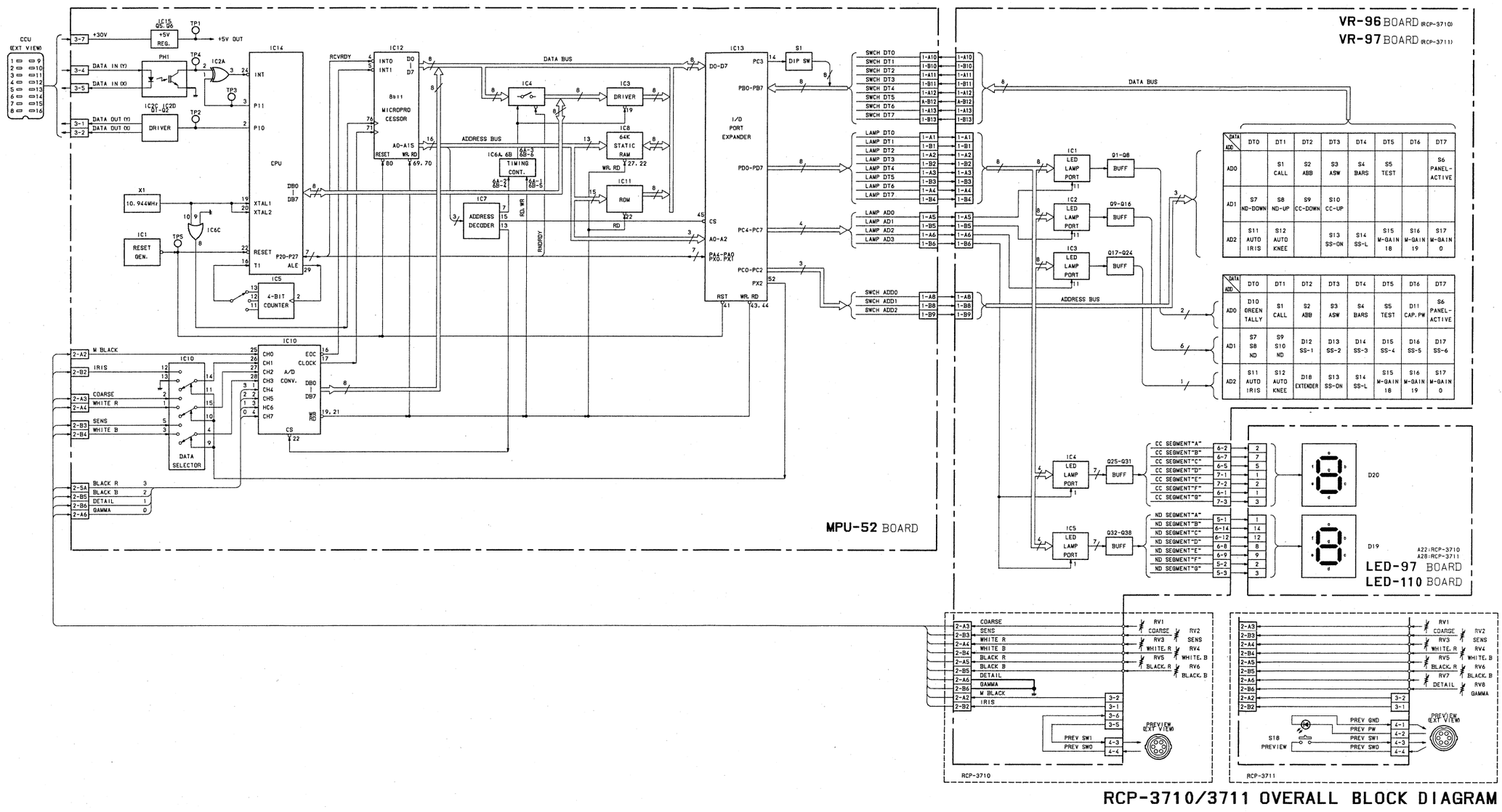
第2章
設　置

2-1.　開梱と再梱包



OA BLOCK LED-97 MPU-52 VA-96 VA-97

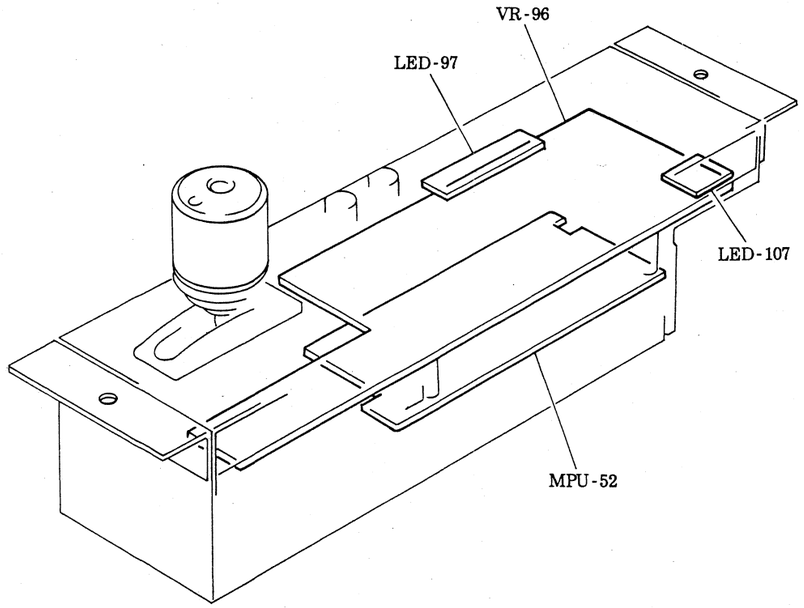
BLOCK DIAGRAM



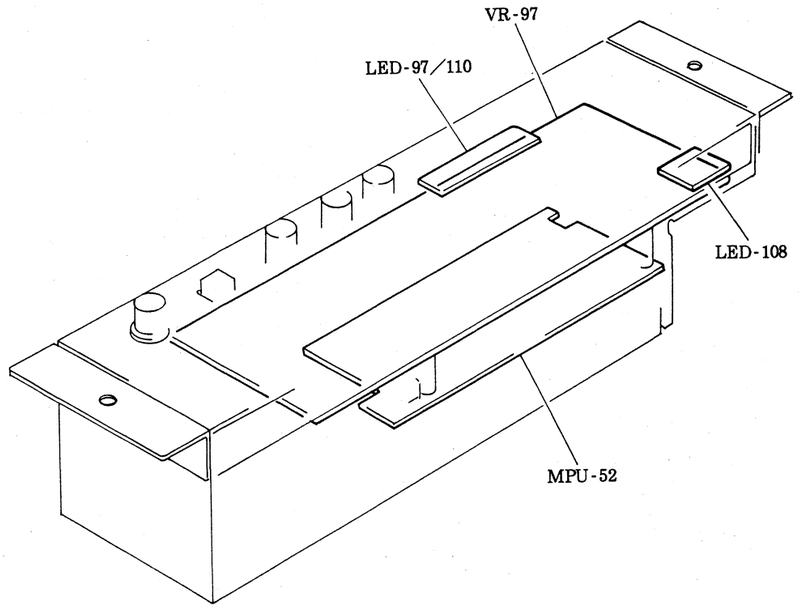
SECTION A
DIAGRAMS

OARD LAYOUT

RCP-3710



RCP-3711

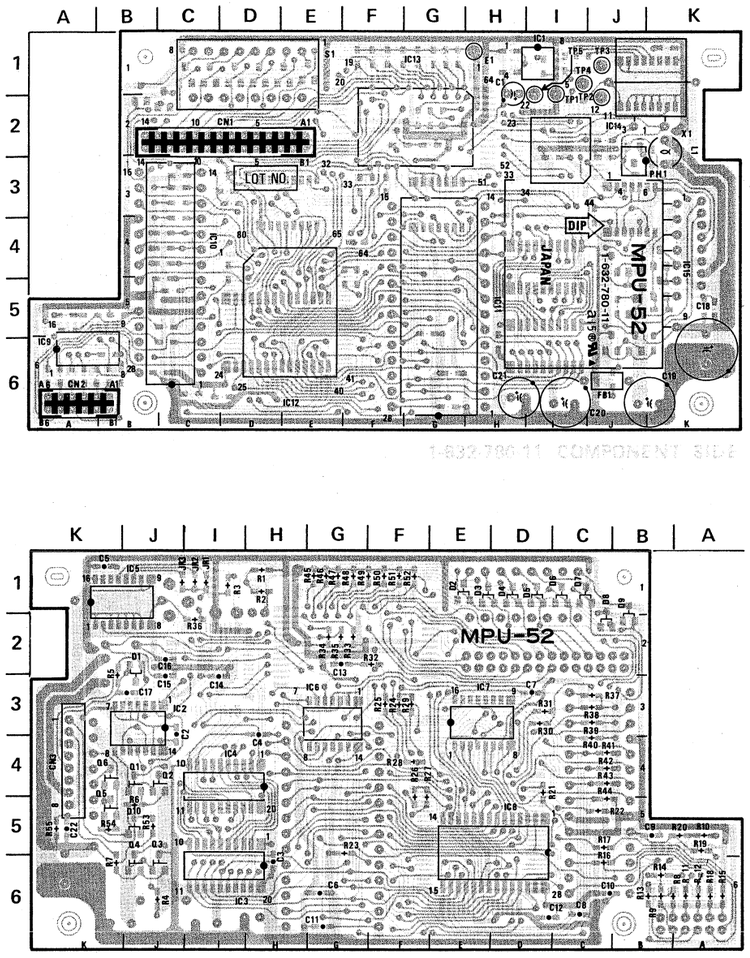


1
2
3
4
5
6

FRAME (FOR RCP-3710)

Ser No.10001-10200

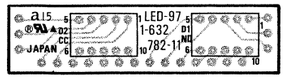
MPU-52 BOARD



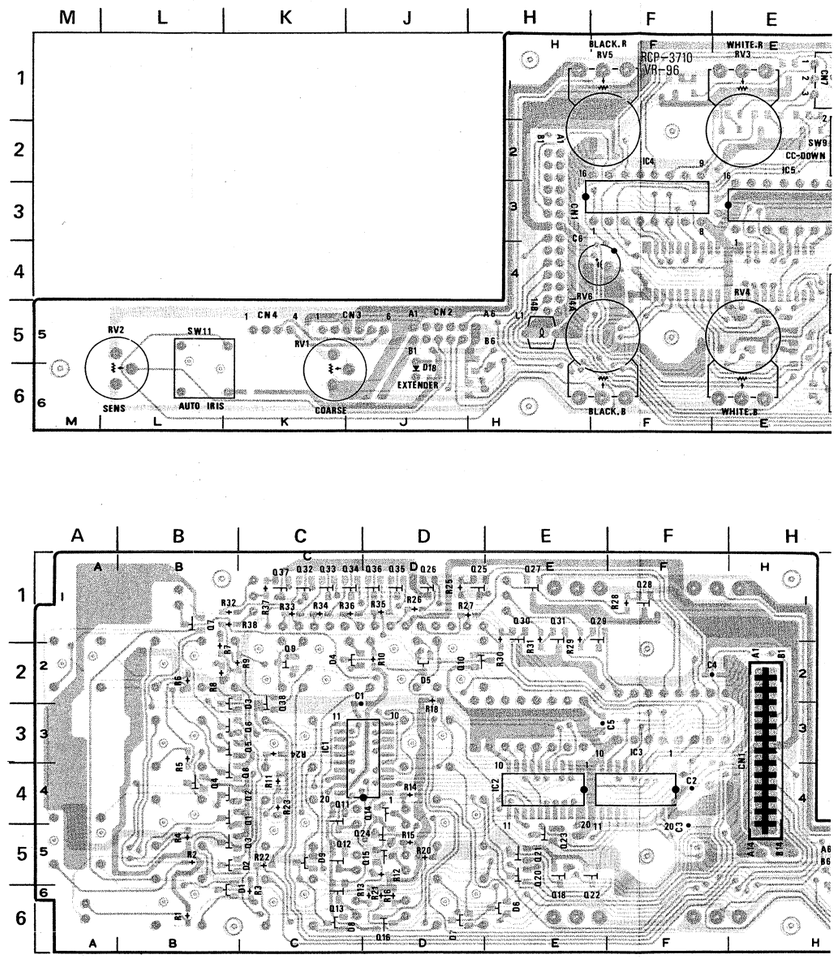
MPU-52 (1-632-780-11)

CNI11	H - 5
CN1	D - 2
CN2	A - 6
CN3	K - 4
D1	J - 2
D2	E - 1
D3	E - 1
D4	D - 1
D5	D - 1
D6	C - 1
D7	C - 1
D8	C - 1
D9	B - 1
D10	J - 5
E1	H - 1
FB1	J - 6
IC1	I - 1
IC2	J - 3
IC3	I - 6
IC4	I - 4
IC5	J - 1
IC6	G - 3
IC7	E - 3
IC8	D - 5
IC9	A - 6
IC10	C - 4
IC11	H - 5
IC12	E - 6
IC13	G - 1
IC14	J - 2
IC15	K - 4
JR1	I - 1
PH1	K - 3
Q1	J - 4
Q2	J - 4
Q3	J - 5
Q4	J - 5
Q5	K - 4
Q6	K - 4
S1	E - 1
TP1	I - 1
TP2	I - 1
TP3	J - 1
TP4	I - 1
TP5	I - 1
X1	K - 2

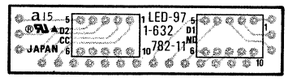
LED-97 BOARD



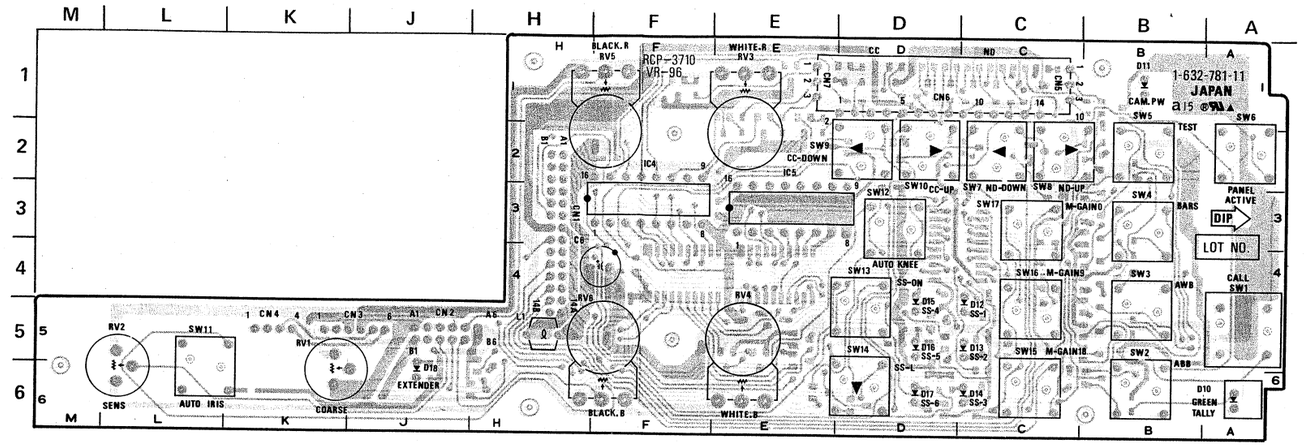
VR-96 BOARD

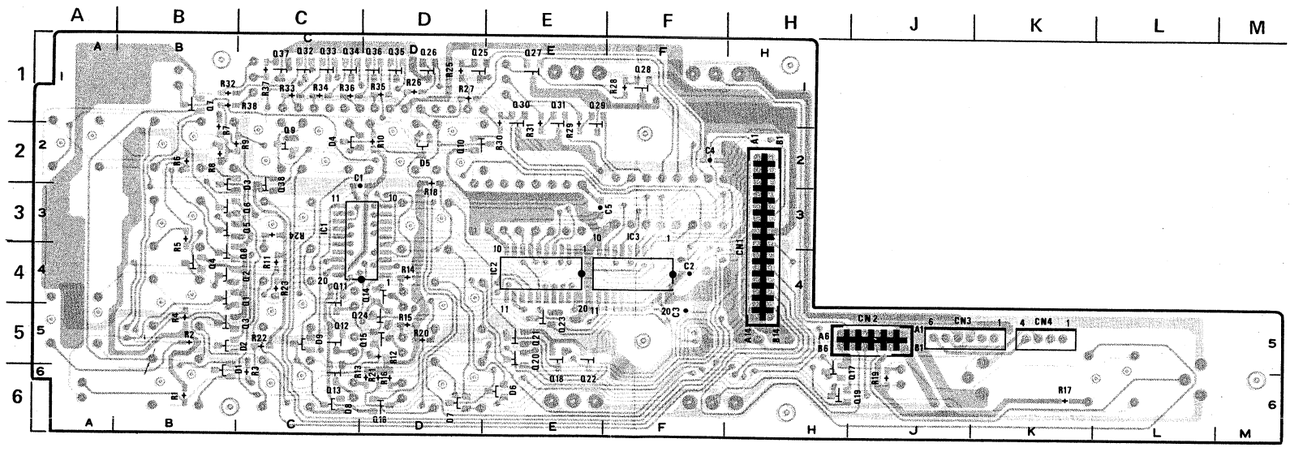


LED-97 BOARD



VR-96 BOARD





1-632-781-11 SOLDERING SIDE

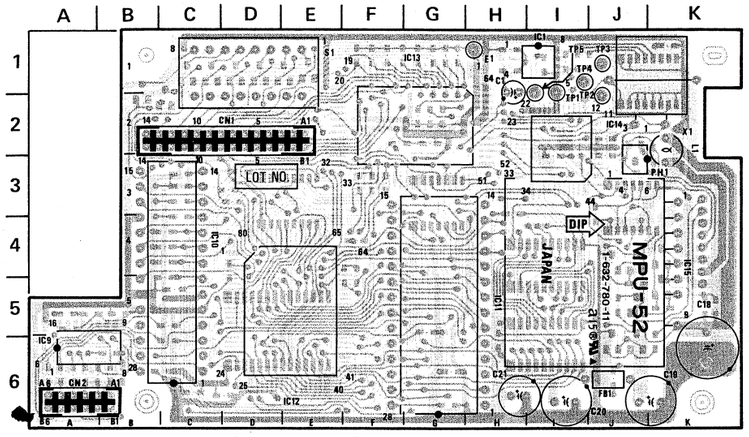
VR-96 (1-632-781-11)

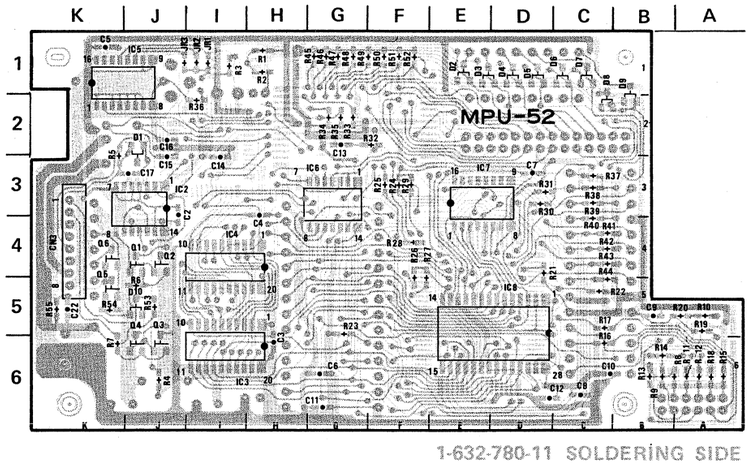
CN2	J - 5	S1	A - 5
CN3	J - 5	S2	B - 6
CN4	K - 5	S3	B - 4
		S4	B - 3
D1	B - 6	S5	B - 2
D2	C - 5	S6	A - 2
D3	C - 3	S7	C - 2
D4	C - 2	S8	C - 2
D5	D - 2	S9	D - 2
D6	E - 6	S10	D - 2
D7	D - 6	S11	L - 6
D8	C - 6	S12	D - 3
D9	C - 5	S13	D - 5
D10	A - 6	S14	D - 6
D11	B - 1	S15	C - 6
D12	C - 4	S16	C - 5
D13	C - 5	S17	C - 3
D14	C - 6		
D15	D - 4		
D16	D - 5		
D17	D - 6		
D18	J - 6		
IC1	C - 3		
IC2	E - 4		
IC3	F - 3		
IC4	F - 2		
IC5	E - 2		
Q1	C - 4		
Q2	C - 4		
Q3	C - 5		
Q4	B - 4		
Q5	C - 3		
Q6	C - 3		
Q7	B - 1		
Q8	C - 4		
Q9	C - 2		
Q10	D - 2		
Q11	C - 4		
Q12	C - 5		
Q13	C - 6		
Q14	D - 4		
Q15	D - 5		
Q16	D - 6		
Q17	J - 6		
Q18	E - 6		
Q19	J - 6		
Q20	E - 5		
Q21	E - 5		
Q22	E - 6		
Q23	E - 5		
Q24	D - 5		
Q25	D - 1		
Q26	D - 1		
Q27	E - 1		
Q28	F - 1		
Q29	E - 1		
Q30	E - 1		
Q31	E - 1		
Q32	C - 1		
Q33	C - 1		
Q34	C - 1		
Q35	D - 1		
Q36	D - 1		
Q37	C - 1		
Q38	C - 3		
RV1	K - 5		
RV2	L - 5		
RV3	E - 1		
RV4	E - 4		
RV5	F - 1		
RV6	H - 4		

FRAME (FOR RCP-3710)

Ser No.10201-10400

MPU-52 BOARD

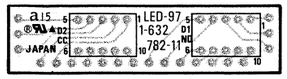




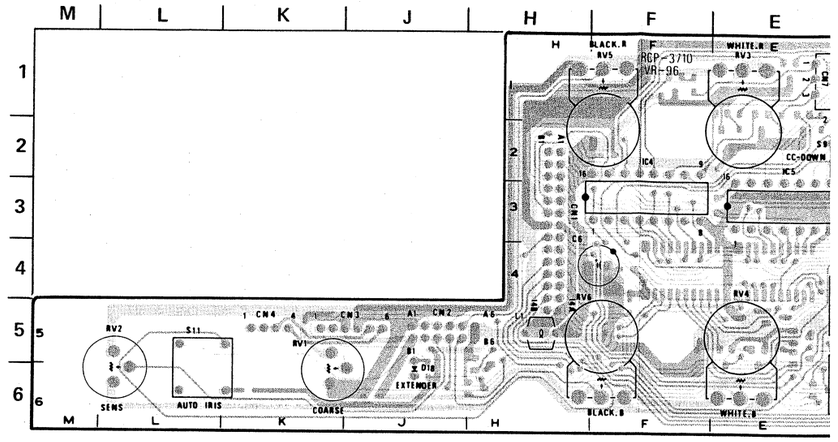
MPU-52 (1-632-780-11)

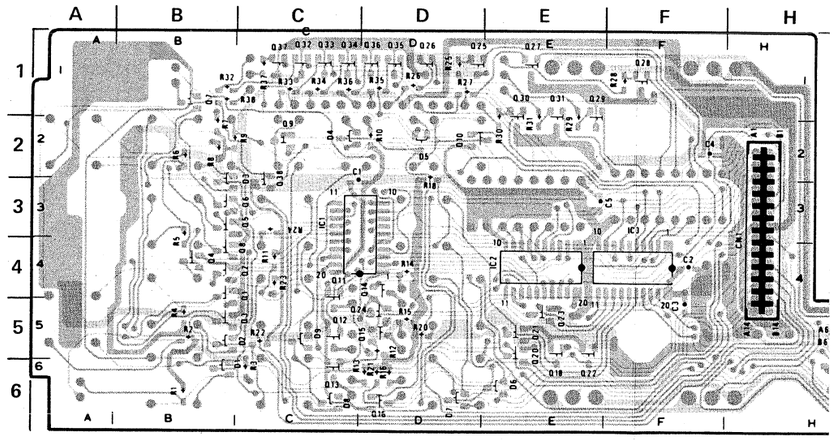
CNI11	H - 5
CN1	D - 2
CN2	A - 6
CN3	K - 4
D1	J - 2
D2	E - 1
D3	E - 1
D4	D - 1
D5	D - 1
D6	C - 1
D7	C - 1
D8	C - 1
D9	B - 1
D10	J - 5
E1	H - 1
FB1	J - 6
IC1	I - 1
IC2	J - 3
IC3	I - 6
IC4	I - 4
IC5	J - 1
IC6	G - 3
IC7	E - 3
IC8	D - 5
IC9	A - 6
IC10	C - 4
IC11	H - 5
IC12	E - 6
IC13	G - 1
IC14	J - 2
IC15	K - 4
JR1	I - 1
PH1	K - 3
Q1	J - 4
Q2	J - 4
Q3	J - 5
Q4	J - 5
Q5	K - 4
Q6	K - 4
S1	E - 1
TP1	I - 1
TP2	I - 1
TP3	J - 1
TP4	I - 1
TP5	I - 1
X1	K - 2

LED-97 BOARD

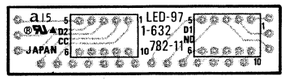


VR-96 BOARD



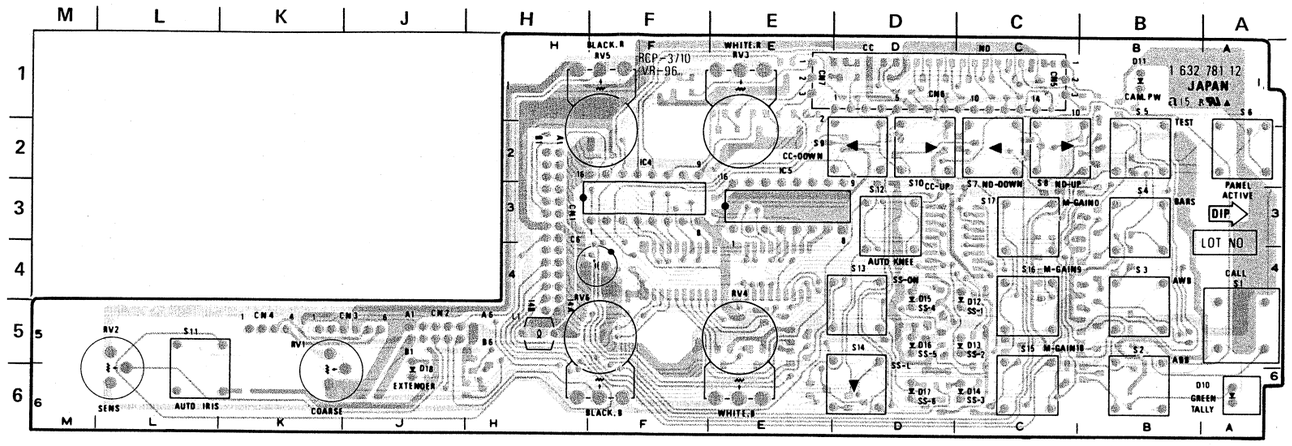


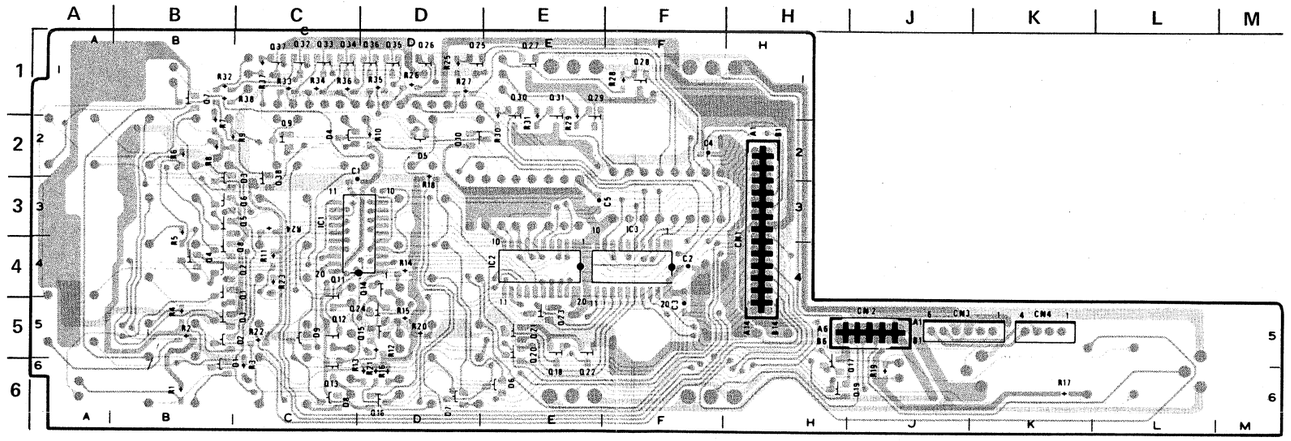
LED-97 BOARD



1-632-782-12 COMPONENT SIDE

VR-96 BOARD





1-632-781-12 SOLDERING SIDE

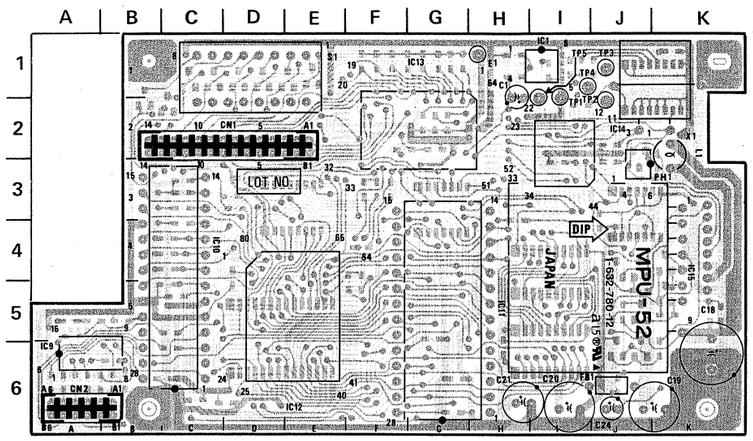
VR-96 (1-632-781-12)

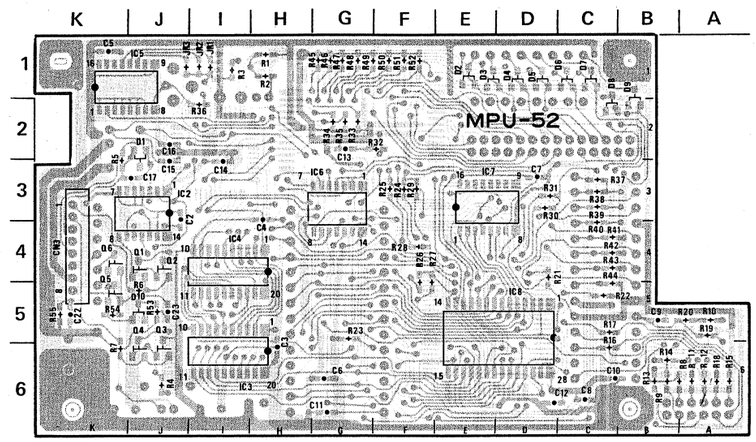
CN1	H - 3	S1	A - 4
CN2	J - 5	S2	B - 5
CN3	J - 5	S3	B - 4
CN4	K - 5	S4	B - 3
		S5	B - 1
D1	B - 6	S6	A - 1
D2	C - 5	S7	C - 2
D3	C - 3	S8	C - 2
D4	C - 2	S9	D - 2
D5	D - 2	S10	D - 2
D6	E - 6	S11	L - 5
D7	D - 6	S12	D - 3
D8	C - 6	S13	D - 4
D9	C - 5	S14	D - 5
D10	A - 6	S15	C - 5
D11	B - 1	S16	C - 4
D12	C - 4	S17	C - 3
D13	C - 5		
D14	C - 6		
D15	D - 4		
D16	D - 5		
D17	D - 6		
D18	J - 6		
IC1	C - 3		
IC2	E - 4		
IC3	F - 3		
IC4	F - 2		
IC5	E - 2		
Q1	C - 4		
Q2	C - 4		
Q3	C - 5		
Q4	B - 4		
Q5	C - 3		
Q6	C - 3		
Q7	B - 1		
Q8	C - 4		
Q9	C - 2		
Q10	D - 2		
Q11	C - 4		
Q12	C - 5		
Q13	C - 6		
Q14	D - 4		
Q15	D - 5		
Q16	D - 6		
Q17	J - 6		
Q18	E - 6		
Q19	J - 6		
Q20	E - 5		
Q21	E - 5		
Q22	E - 6		
Q23	E - 5		
Q24	D - 5		
Q25	D - 1		
Q26	D - 1		
Q27	E - 1		
Q28	F - 1		
Q29	E - 1		
Q30	E - 1		
Q31	E - 1		
Q32	C - 1		
Q33	C - 1		
Q34	C - 1		
Q35	D - 1		
Q36	D - 1		
Q37	C - 1		
Q38	C - 3		
RV1	K - 5		
RV2	L - 5		
RV3	E - 1		
RV4	E - 4		
RV5	F - 1		
RV6	H - 4		

FRAME (FOR RCP-3710)

Ser No.10401-

MPU-52 BOARD

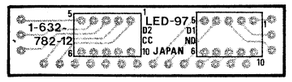




MPU-52 (1-632-780-12)

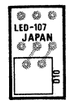
CN111	H - 5
CN1	D - 2
CN2	A - 6
CN3	K - 4
D1	J - 2
D2	E - 1
D3	E - 1
D4	D - 1
D5	D - 1
D6	C - 1
D7	C - 1
D8	C - 1
D9	B - 1
D10	J - 5
E1	H - 1
FB1	J - 6
IC1	I - 1
IC2	J - 3
IC3	I - 6
IC4	I - 4
IC5	J - 1
IC6	G - 3
IC7	E - 3
IC8	D - 5
IC9	A - 6
IC10	C - 4
IC11	H - 5
IC12	E - 6
IC13	G - 1
IC14	J - 2
IC15	K - 4
JR1	I - 1
PH1	K - 3
Q1	J - 4
Q2	J - 4
Q3	J - 5
Q4	J - 5
Q5	K - 4
Q6	K - 4
S1	E - 1
TP1	I - 1
TP2	I - 1
TP3	J - 1
TP4	I - 1
TP5	I - 1
X1	K - 2

LED-97 BOARD



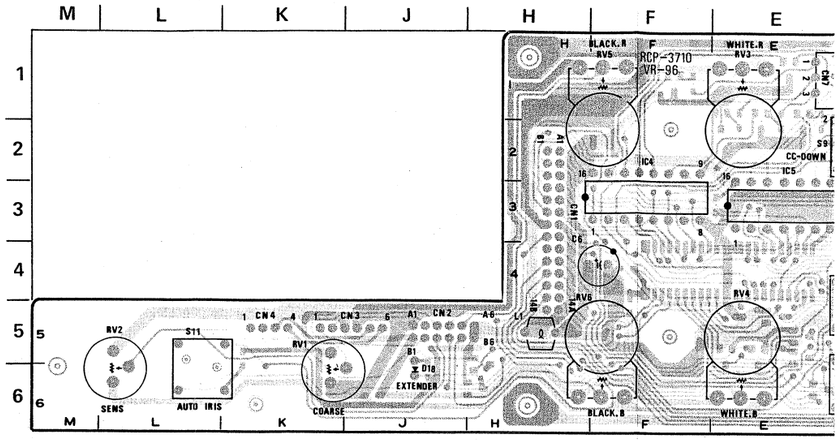
1-632-782-12 COMPONENT SIDE

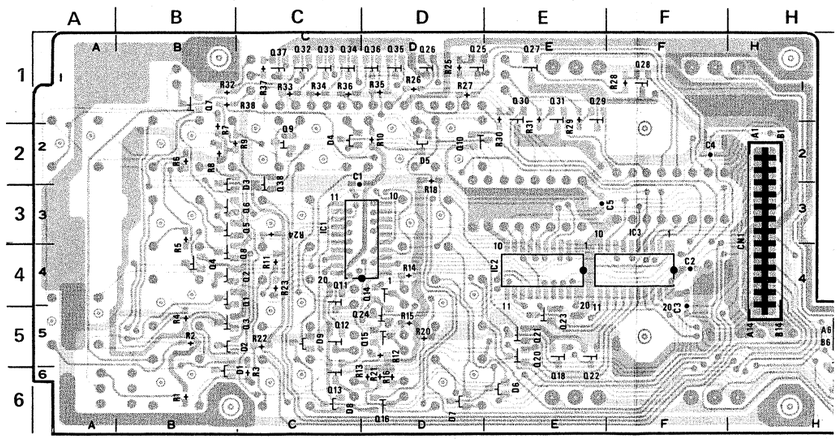
LED-107 BOARD



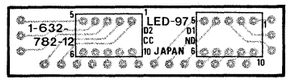
1-634-921-11 COMPONENT SIDE

VR-96 BOARD



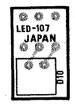


LED-97 BOARD



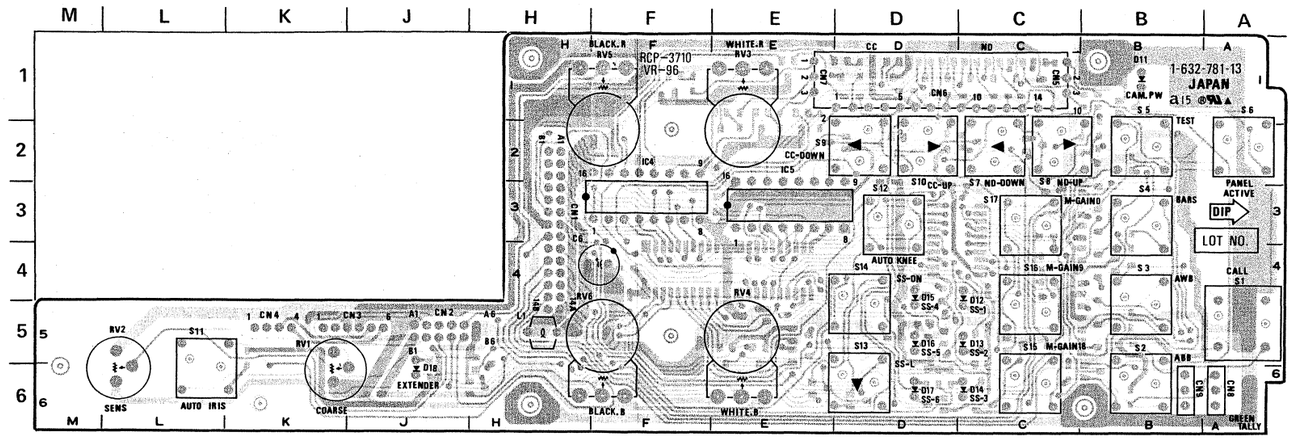
1-632-782-12 COMPONENT SIDE

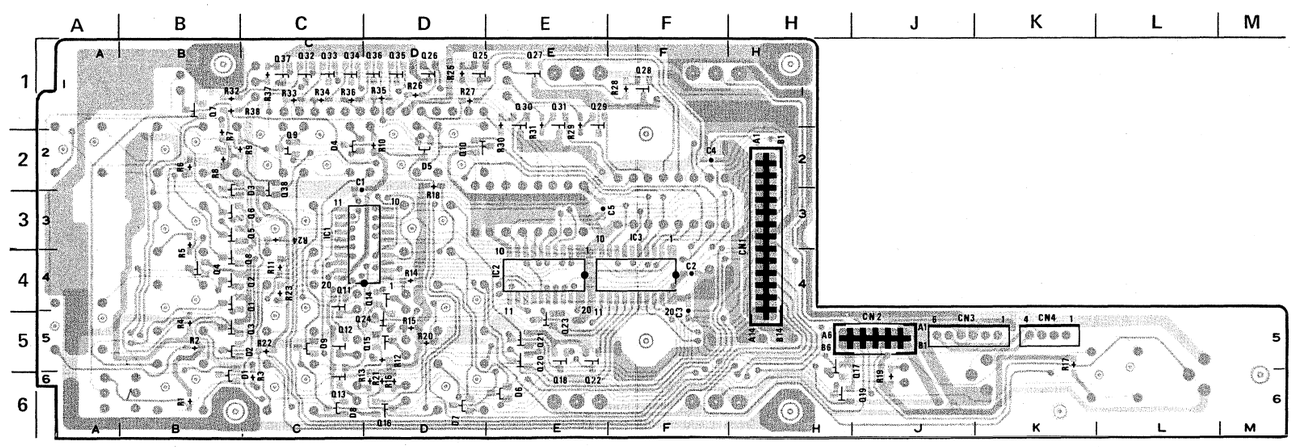
LED-107 BOARD



1-634-921-11 COMPONENT SIDE

VR-96 BOARD





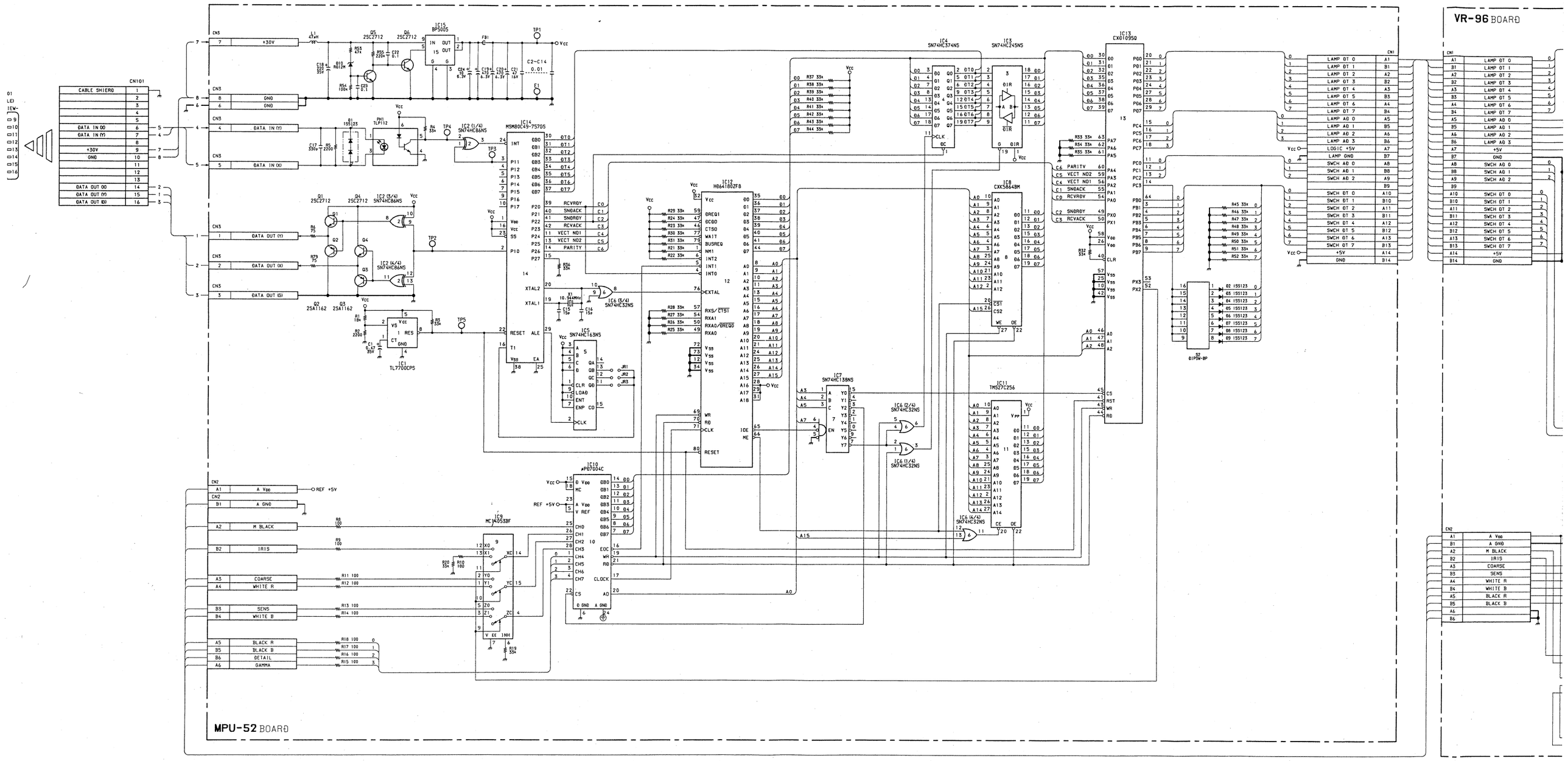
1-632-781-13 SOLDERING SIDE

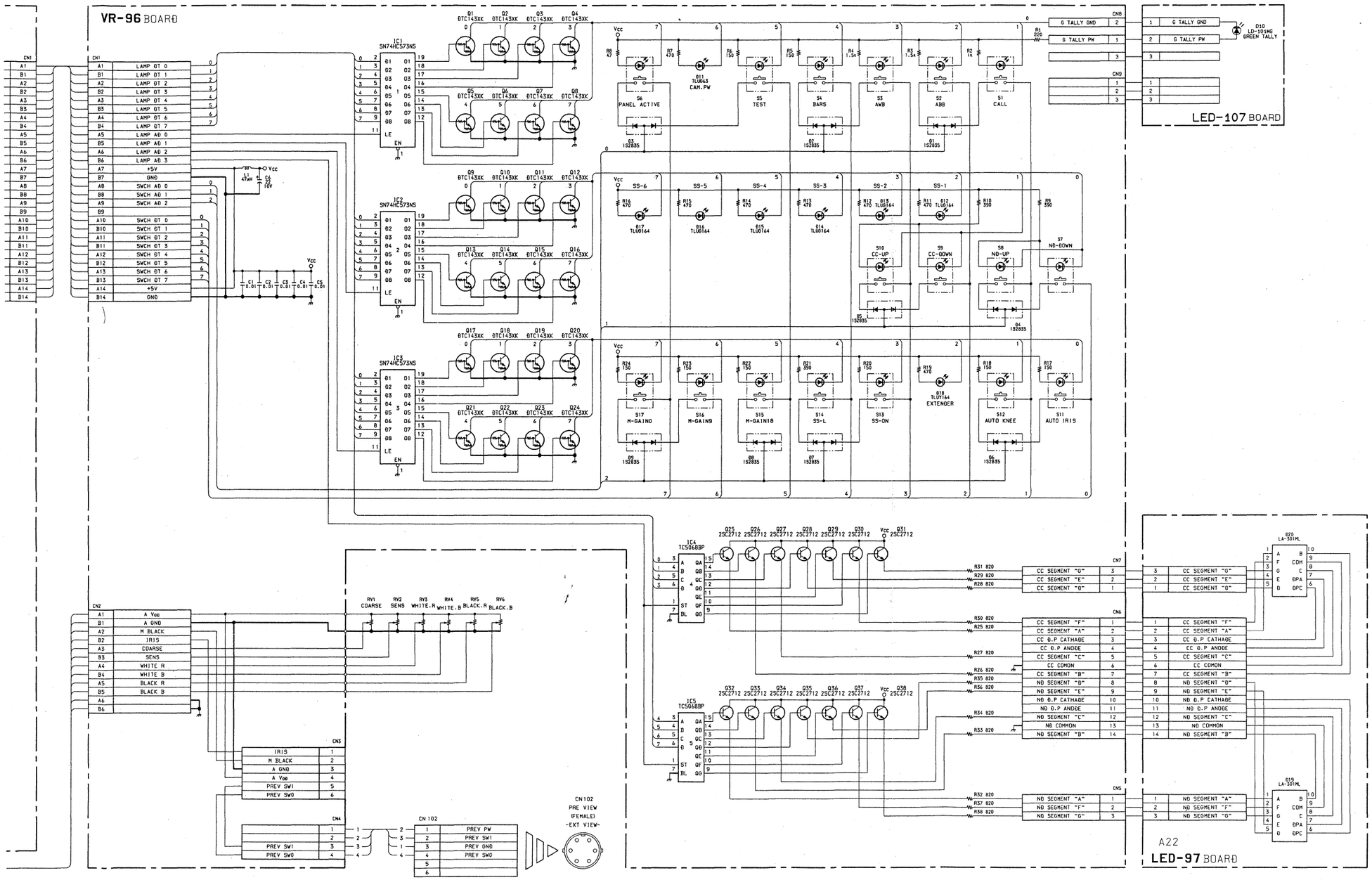
VR-96 (1-632-781-13)

CN1	H - 3	S1	A - 4
CN2	J - 5	S2	B - 5
CN3	J - 5	S3	B - 4
CN4	K - 5	S4	B - 3
		S5	B - 1
D1	B - 6	S6	A - 1
D2	C - 5	S7	C - 2
D3	C - 3	S8	C - 2
D4	C - 2	S9	D - 2
D5	D - 2	S10	D - 2
D6	E - 6	S11	L - 5
D7	D - 6	S12	D - 3
D8	C - 6	S13	D - 5
D9	C - 5	S14	D - 4
D11	B - 1	S15	C - 5
D12	C - 4	S16	C - 4
D13	C - 5	S17	C - 3
D14	C - 6		
D15	D - 4		
D16	D - 5		
D17	D - 6		
D18	J - 6		
IC1	C - 3		
IC2	E - 4		
IC3	F - 3		
IC4	F - 2		
IC5	E - 2		
Q1	C - 4		
Q2	C - 4		
Q3	C - 5		
Q4	B - 4		
Q5	C - 3		
Q6	C - 3		
Q7	B - 1		
Q8	C - 4		
Q9	C - 2		
Q10	D - 2		
Q11	C - 4		
Q12	C - 5		
Q13	C - 6		
Q14	D - 4		
Q15	D - 5		
Q16	D - 6		
Q17	J - 6		
Q18	E - 6		
Q19	J - 6		
Q20	E - 5		
Q21	E - 5		
Q22	E - 6		
Q23	E - 5		
Q24	D - 5		
Q25	D - 1		
Q26	D - 1		
Q27	E - 1		
Q28	F - 1		
Q29	E - 1		
Q30	E - 1		
Q31	E - 1		
Q32	C - 1		
Q33	C - 1		
Q34	C - 1		
Q35	D - 1		
Q36	D - 1		
Q37	C - 1		
Q38	C - 3		
RV1	K - 5		
RV2	L - 5		
RV3	E - 1		
RV4	E - 4		
RV5	F - 1		
RV6	H - 4		

AME WIRING (FOR RCP-3710)

D-97 BOARD
U-52 BOARD
-96 BOARD



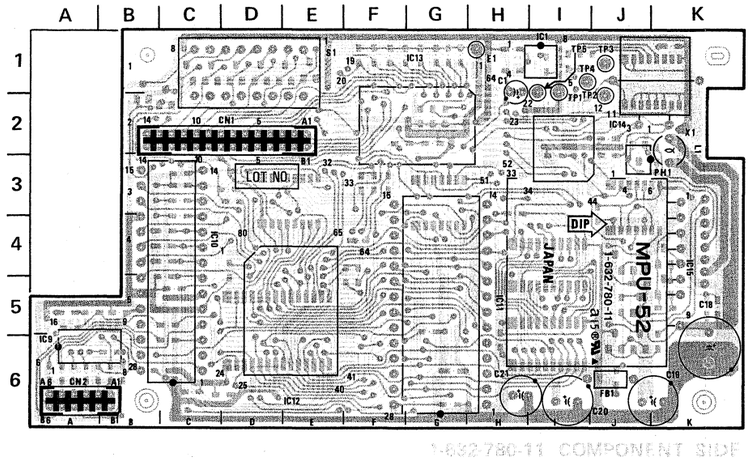

VR-96 BOARD
CN1
LAMP DT 0
LAMP DT 1
LAMP DT 2
LAMP DT 3
LAMP DT 4
LAMP DT 5
LAMP DT 6
LAMP DT 7
LAMP AD 0
LAMP AD 1
LAMP AD 2
LAMP AD 3
+5V
GND
SWCH AD 0
SWCH AD 1
SWCH AD 2
SWCH DT 0
SWCH DT 1
SWCH DT 2
SWCH DT 3
SWCH DT 4
SWCH DT 5
SWCH DT 6
SWCH DT 7
+5V
GND
IC1 SN74HC573NS
IC2 SN74HC573NS
IC3 SN74HC573NS
DTC143XK
S6 PANEL ACTIVE
S5 TEST
S4 BARS
S3 AWB
S2 ABB
S1 CALL
D11 TLU043 CAM.PW
SS-6
SS-5
SS-4
SS-3
SS-2
SS-1
TLU0164
S10 CC-UP
S9 CC-DOWN
S8 ND-UP
S7 ND-DOWN
S17 M-GAIN0
S16 M-GAIN9
S15 M-GAIN18
S14 SS-L
S13 SS-DN
D18 TLU0164 EXTENDER
S12 AUTO KNEE
S11 AUTO IRIS
CN8
G TALLY GND
G TALLY PW
CN9
D10 LD-101MG GREEN TALLY
LED-107 BOARD
IC4 TC5068BP
IC5 TC5068BP
2SC2712
CC SEGMENT "G"
CC SEGMENT "E"
CC SEGMENT "D"
CC SEGMENT "F"
CC SEGMENT "A"
CC O.P CATHADE
CC O.P ANODE
CC SEGMENT "C"
CC COMON
CC SEGMENT "B"
ND SEGMENT "D"
ND SEGMENT "E"
ND O.P CATHADE
ND O.P ANODE
ND SEGMENT "C"
ND COMMON
ND SEGMENT "B"
ND SEGMENT "A"
ND SEGMENT "F"
ND SEGMENT "G"
LA-301MK
A22
LED-97 BOARD
CN2
A Vcc
A GND
M BLACK
IRIS
COARSE
SENS
WHITE R
WHITE B
BLACK R
BLACK B
RV1 COARSE
RV2 SENS
RV3 WHITE.R
RV4 WHITE.B
RV5 BLACK.R
RV6 BLACK.B
CN3
IRIS
M BLACK
A GND
A Vcc
PREV SW1
PREV SW0
CN4
CN102
PREV PW
PREV SW1
PREV GND
PREV SW0
CN102 PRE VIEW (FEMALE) -EXT VIEW-

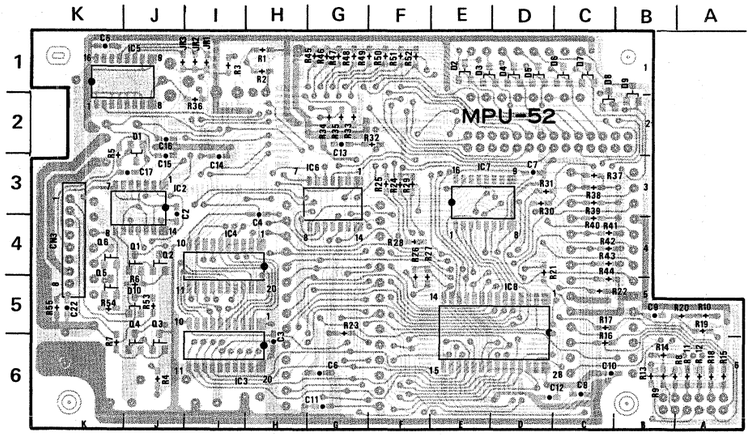
A-13 A-14

FRAME (FOR RCP-3711)

Ser No.10001-10200

MPU-52 BOARD

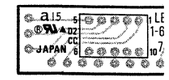




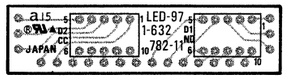
MPU-52 (1-632-780-11)

CNI11	H - 5
CN1	D - 2
CN2	A - 6
CN3	K - 4
D1	J - 2
D2	E - 1
D3	E - 1
D4	D - 1
D5	D - 1
D6	C - 1
D7	C - 1
D8	C - 1
D9	B - 1
D10	J - 5
E1	H - 1
FB1	J - 6
IC1	I - 1
IC2	J - 3
IC3	I - 6
IC4	I - 4
IC5	J - 1
IC6	G - 3
IC7	E - 3
IC8	D - 5
IC9	A - 6
IC10	C - 4
IC11	H - 5
IC12	E - 6
IC13	G - 1
IC14	J - 2
IC15	K - 4
JR1	I - 1
PH1	K - 3
Q1	J - 4
Q2	J - 4
Q3	J - 5
Q4	J - 5
Q5	K - 4
Q6	K - 4
S1	E - 1
TP1	I - 1
TP2	I - 1
TP3	J - 1
TP4	I - 1
TP5	I - 1
X1	K - 2

LED-97 BOARD

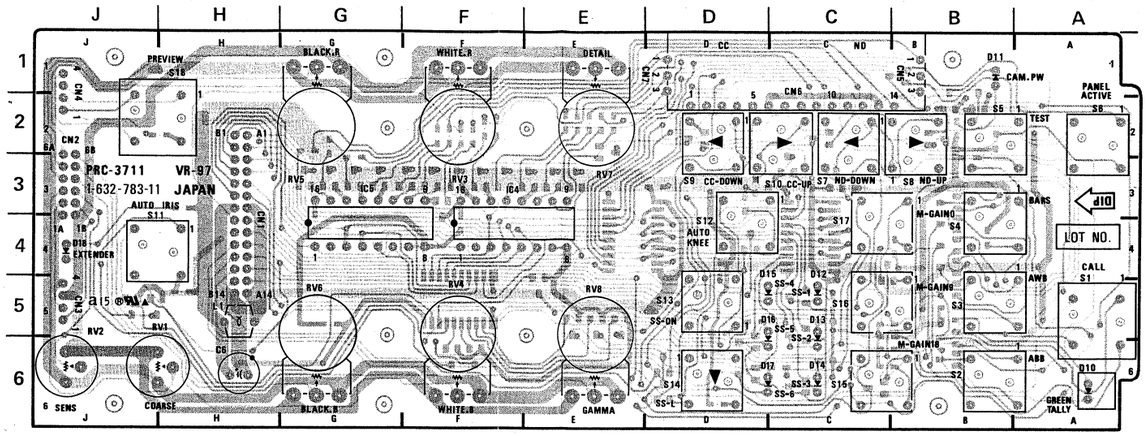


LED-97 BOARD

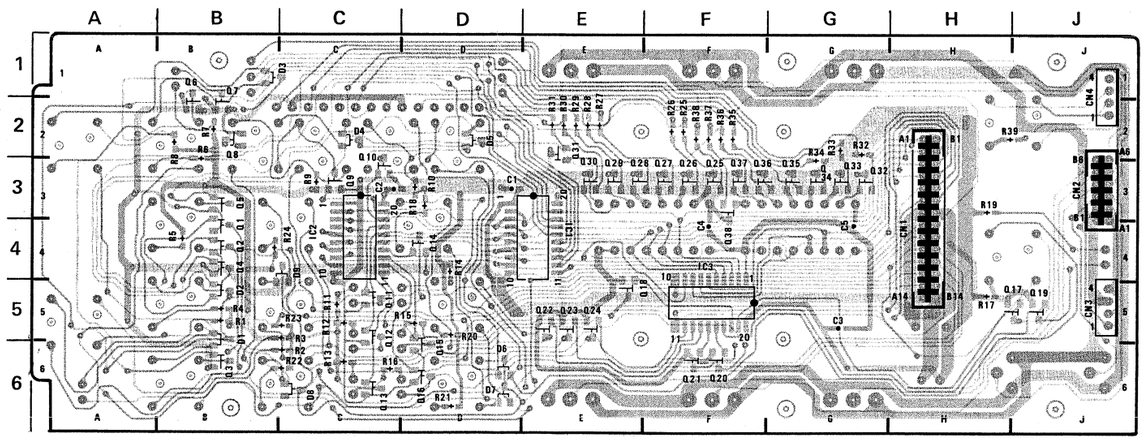


1-632-782-11 COMPONENT SIDE

VR-97 BOARD



1-632-783-11 COMPONENT SIDE



1-632-783-11 SOLDERING SIDE

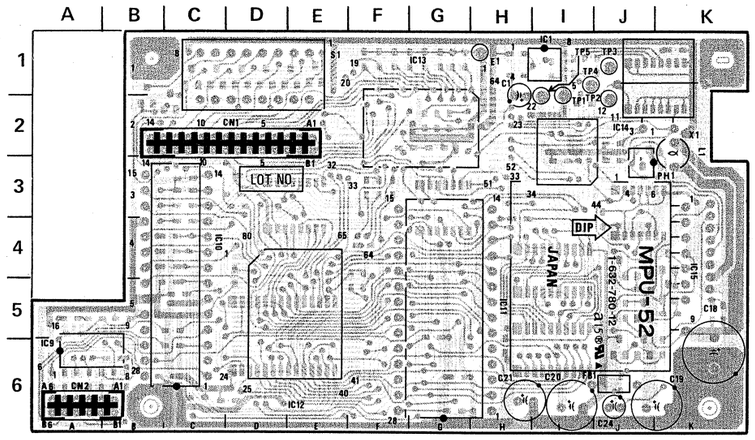
VR-97 (1-632-783-11)

CN1	H - 4	S1	A - 5
CN2	J - 2	S2	B - 6
CN3	J - 5	S3	B - 5
CN4	J - 1	S4	B - 4
		S5	B - 2
D1	B - 5	S6	A - 2
D2	B - 5	S7	C - 3
D3	B - 1	S8	B - 3
D4	C - 2	S9	D - 3
D5	D - 2	S10	C - 2
D6	D - 6	S11	H - 4
D7	D - 6	S12	D - 4
D8	C - 6	S13	D - 5
D9	C - 4	S14	D - 6
D10	A - 6	S15	C - 6
D11	B - 1	S16	C - 5
D12	C - 4	S17	C - 4
D13	C - 5	S18	H - 1
D14	C - 6		
D15	C - 5		
D16	C - 5		
D17	C - 6		
D18	J - 4		
IC1	E - 4		
IC2	C - 4		
IC3	F - 4		
IC4	F - 3		
IC5	G - 3		
Q1	B - 4		
Q2	B - 4		
Q3	B - 6		
Q4	B - 4		
Q5	B - 3		
Q6	B - 1		
Q7	B - 1		
Q8	B - 2		
Q9	C - 3		
Q10	C - 3		
Q11	C - 5		
Q12	C - 5		
Q13	C - 6		
Q14	D - 4		
Q15	D - 6		
Q16	D - 6		
Q17	J - 5		
Q18	E - 5		
Q19	J - 5		
Q20	F - 6		
Q21	F - 6		
Q22	E - 5		
Q23	E - 5		
Q24	E - 5		
Q25	F - 3		
Q26	F - 3		
Q27	F - 3		
Q28	E - 3		
Q29	E - 3		
Q30	E - 3		
Q31	E - 2		
Q32	G - 3		
Q33	G - 3		
Q34	G - 3		
Q35	G - 3		
Q36	F - 3		
Q37	F - 3		
Q38	F - 4		
RV1	H - 6		
RV2	J - 5		
RV3	F - 3		
RV4	F - 5		
RV5	G - 3		
RV6	G - 5		
RV7	E - 3		
RV8	E - 5		

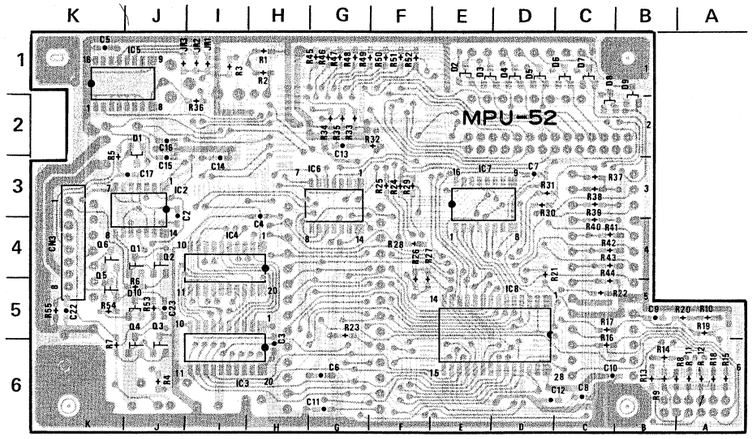
FRAME (FOR RCP-3711)

Ser No.10201-

MPU-52 BOARD



1-632-780-12 COMPONENT SIDE

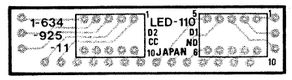


1-632-780-12 SOLDERING SIDE

MPU-52 (1-632-780-12)

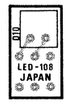
CN111	H - 5
CN1	D - 2
CN2	A - 6
CN3	K - 4
D1	J - 2
D2	E - 1
D3	E - 1
D4	D - 1
D5	D - 1
D6	C - 1
D7	C - 1
D8	C - 1
D9	B - 1
D10	J - 5
E1	H - 1
FB1	J - 6
IC1	I - 1
IC2	J - 3
IC3	I - 6
IC4	I - 4
IC5	J - 1
IC6	G - 3
IC7	E - 3
IC8	D - 5
IC9	A - 6
IC10	C - 4
IC11	H - 5
IC12	E - 6
IC13	G - 1
IC14	J - 2
IC15	K - 4
JR1	I - 1
PH1	K - 3
Q1	J - 4
Q2	J - 4
Q3	J - 5
Q4	J - 5
Q5	K - 4
Q6	K - 4
S1	E - 1
TP1	I - 1
TP2	I - 1
TP3	J - 1
TP4	I - 1
TP5	I - 1
X1	K - 2

LED-110 BOARD



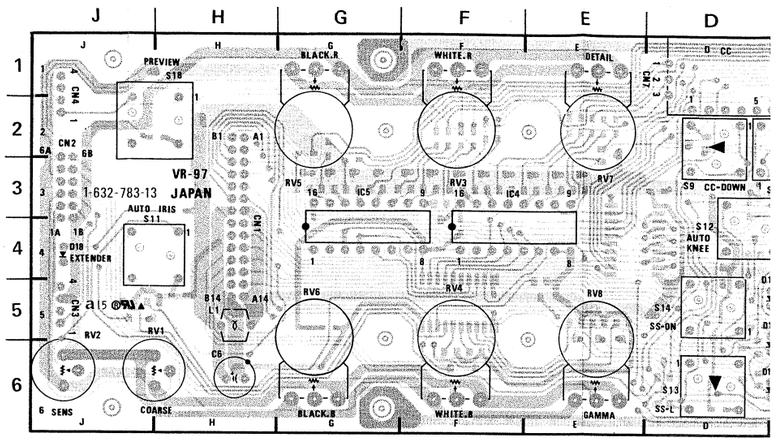
1-634-922-11 COMPONENT SIDE

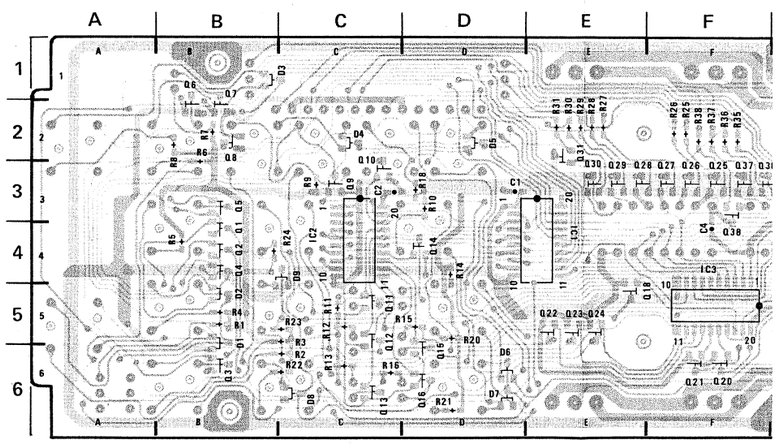
LED-108 BOARD



1-634-922-11 COMPONENT SIDE

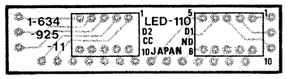
VR-97 BOARD





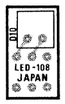
780-12)

LED-110 BOARD



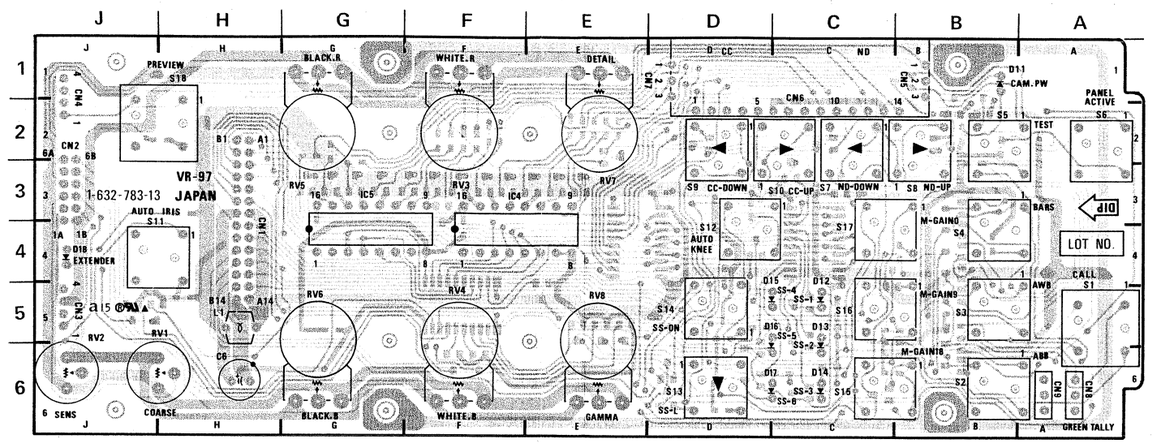
1-634-925-11 COMPONENT SIDE

LED-108 BOARD

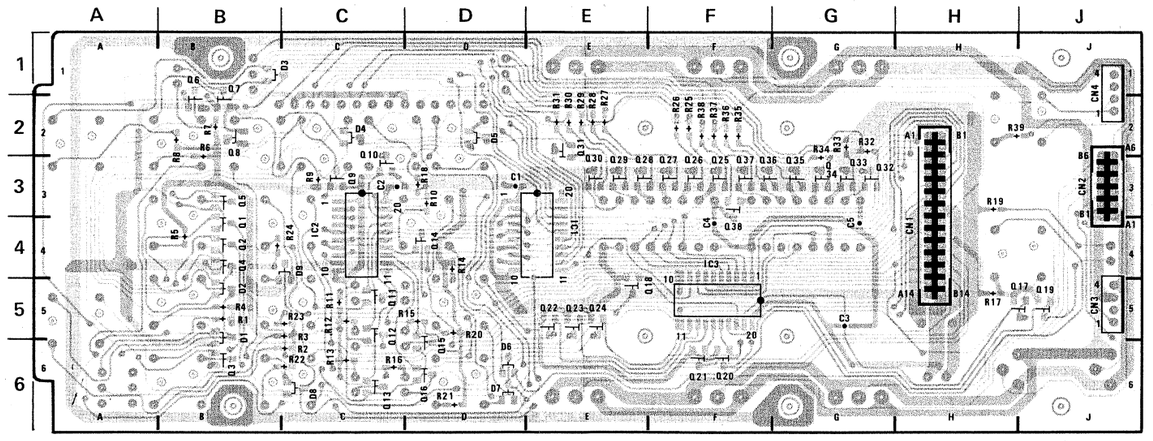


1-634-922-11 COMPONENT SIDE

VR-97 BOARD



1-632-783-13 COMPONENT SIDE



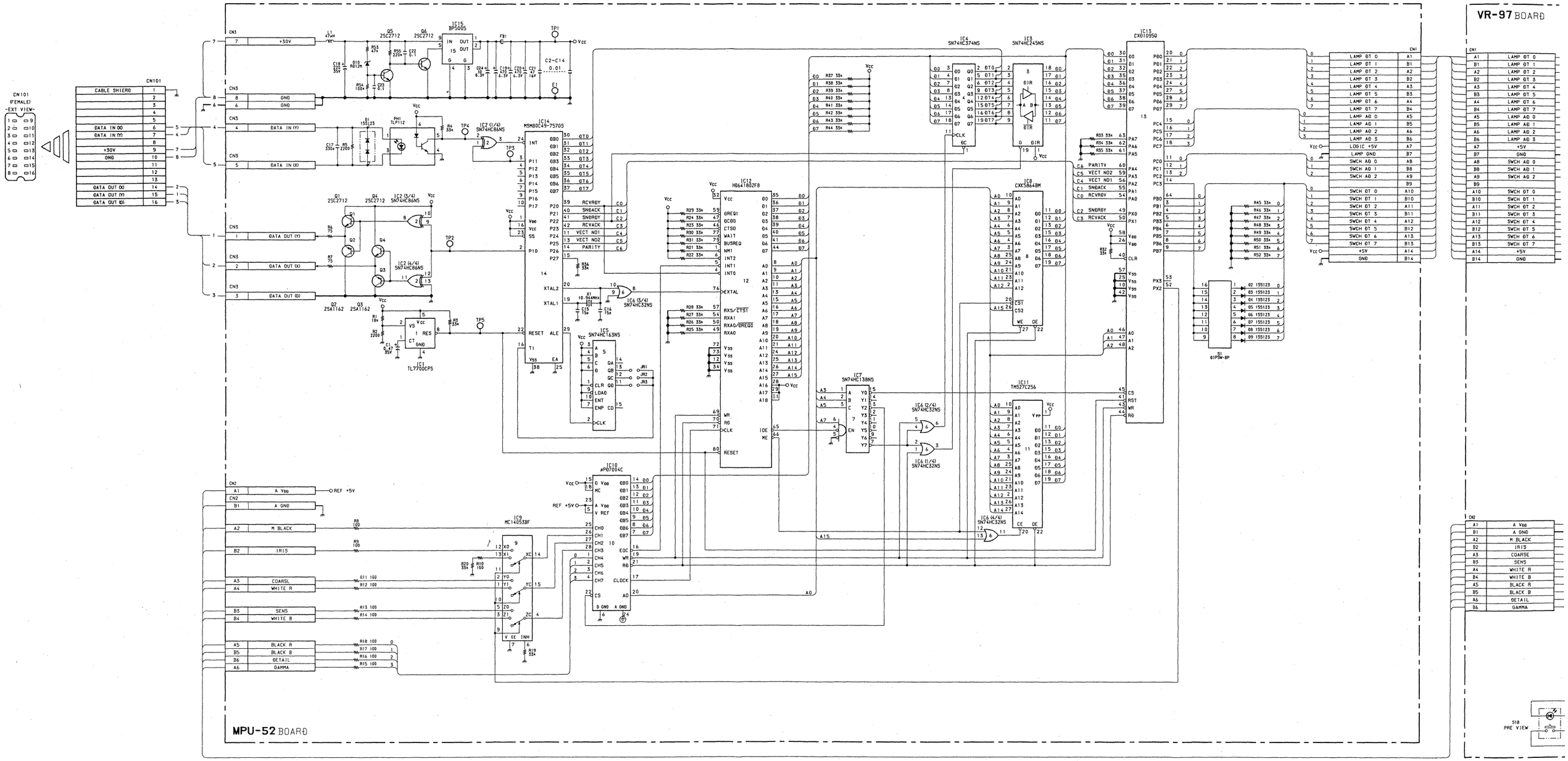
1-632-783-13 SOLDERING SIDE

VR-97 (1-632-783-13)

CN1	H - 4	S1	A - 5
CN2	J - 2	S2	B - 6
CN3	J - 5	S3	B - 5
CN4	J - 1	S4	B - 4
		S5	B - 2
D1	B - 5	S6	A - 2
D2	B - 5	S7	C - 3
D3	B - 1	S8	B - 3
D4	C - 2	S9	D - 3
D5	D - 2	S10	C - 2
D6	D - 6	S11	H - 4
D7	D - 6	S12	D - 4
D8	C - 6	S13	D - 6
D9	C - 4	S14	D - 5
D11	B - 1	S15	C - 6
D12	C - 4	S16	C - 5
D13	C - 5	S17	C - 4
D14	C - 6	S18	H - 1
D15	C - 5		
D16	C - 5		
D17	C - 6		
D18	J - 4		
IC1	E - 4		
IC2	C - 4		
IC3	F - 4		
IC4	F - 3		
IC5	G - 3		
Q1	B - 4		
Q2	B - 4		
Q3	B - 6		
Q4	B - 4		
Q5	B - 3		
Q6	B - 1		
Q7	B - 1		
Q8	B - 2		
Q9	C - 3		
Q10	C - 3		
Q11	C - 5		
Q12	C - 5		
Q13	C - 6		
Q14	D - 4		
Q15	D - 6		
Q16	D - 6		
Q17	J - 5		
Q18	E - 5		
Q19	J - 5		
Q20	F - 6		
Q21	F - 6		
Q22	E - 5		
Q23	E - 5		
Q24	E - 5		
Q25	F - 3		
Q26	F - 3		
Q27	F - 3		
Q28	E - 3		
Q29	E - 3		
Q30	E - 3		
Q31	E - 2		
Q32	G - 3		
Q33	G - 3		
Q34	G - 3		
Q35	G - 3		
Q36	F - 3		
Q37	F - 3		
Q38	F - 4		
RV1	H - 6		
RV2	J - 5		
RV3	F - 3		
RV4	F - 5		
RV5	G - 3		
RV6	G - 5		
RV7	E - 3		
RV8	E - 5		

FRAME WIRING (FOR RCP-3711)

LED-97 BOARD
MPU-52 BOARD
VR-97 BOARD



RCP-3711 | FRAME | FRAME | RCP-3711

VR-97 BOARD

CN1

A1	LAMP DT 0
B1	LAMP DT 1
A2	LAMP DT 2
B2	LAMP DT 3
A3	LAMP DT 4
B3	LAMP DT 5
A4	LAMP DT 6
B4	LAMP DT 7
A5	LAMP AD 0
B5	LAMP AD 1
A6	LAMP AD 2
B6	LAMP AD 3
A7	+5V
B7	GND
A8	SWCH AD 0
B8	SWCH AD 1
A9	SWCH AD 2
B9	
A10	SWCH DT 0
B10	SWCH DT 1
A11	SWCH DT 2
B11	SWCH DT 3
A12	SWCH DT 4
B12	SWCH DT 5
A13	SWCH DT 6
B13	SWCH DT 7
A14	+5V
B14	GND

IC1 IC2 IC3 SN74HC573NS

Q1–Q24 DTC143XK

CN8

1	G TALLY GND
2	G TALLY PW
3	

D10 LD-101MG GREEN TALLY

CN9

1	
2	
3	

LED-108 BOARD

Q11 TLU663 CAM.PW

S6 PANEL ACTIVE

S5 TEST

S4 BARS

S3 AWB

S2 ABB

S1 CALL

SS-6 SS-5 SS-4 SS-3 SS-2 SS-1

S100 CC-UP

S9 CC-DOWN

S8 ND-UP

S7 ND-DOWN

S17 M-GAIN0

S16 M-GAIN9

S15 M-GAIN18

S14 SS-L

S13 SS-ON

D18 TLOY164 EXTENDER

S12 AUTO KNEE

S11 AUTO IRIS

CN2

A1	A Vee
B1	A GND
A2	M BLACK
B2	IRIS
A3	COARSE
B3	SENS
A4	WHITE R
B4	WHITE B
A5	BLACK R
B5	BLACK B
A6	DETAIL
B6	GAMMA

RV1 COARSE RV2 SENS RV3 WHITE.R RV4 WHITE.B RV5 BLACK.R RV6 BLACK.B RV7 DETAIL RV8 GAMMA

CN5

IRIS	1
M BLACK	2
A GND	3
A Vee	4

S18 PRE VIEW

CN4

PREV GND	1
PREV PW	2
PREV SW1	3
PREV SW0	4

CN102

1	PREV PW
2	PREV SW1
3	PREV GND
4	PREV SW0
5	
6	

CN102 PRE VIEW (FEMALE) -EXT VIEW-

IC4 IC5 TC5068BP

Q25–Q38 2SC2712

CN7

CC SEGMENT "G"	3
CC SEGMENT "E"	2
CC SEGMENT "D"	1

CN6

CC SEGMENT "F"	1
CC SEGMENT "A"	2
CC D.P CATHADE	3
CC D.P ANODE	4
CC SEGMENT "C"	5
CC COMON	6
CC SEGMENT "B"	7
ND SEGMENT "D"	8
ND SEGMENT "E"	9
ND D.P CATHADE	10
ND D.P ANODE	11
ND SEGMENT "C"	12
ND COMMON	13
ND SEGMENT "B"	14

CN5

ND SEGMENT "A"	1
ND SEGMENT "F"	2
ND SEGMENT "G"	3

CN7

3	CC SEGMENT "G"
2	CC SEGMENT "E"
1	CC SEGMENT "D"

CN6

1	CC SEGMENT "F"
2	CC SEGMENT "A"
3	CC D.P CATHADE
4	CC D.P ANODE
5	CC SEGMENT "C"
6	CC COMON
7	CC SEGMENT "B"
8	ND SEGMENT "D"
9	ND SEGMENT "E"
10	ND D.P CATHADE
11	ND D.P ANODE
12	ND SEGMENT "C"
13	ND COMMON
14	ND SEGMENT "B"

CN5

1	ND SEGMENT "A"
2	ND SEGMENT "F"
3	ND SEGMENT "G"

D20 LA-301MK

D19 LA-301MK

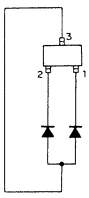
A28
LED-97 BOARD
LED-110 BOARD

A-21

A-22

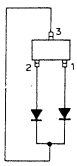
B-RCP3711-FRAME

TOP VIEW (SCALE 4/1)



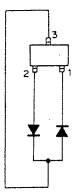
1S2835
1S2836

TOP VIEW (SCALE 4/1)

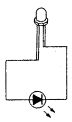


1S2837
1S2838

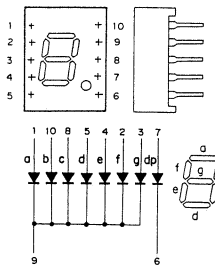
TOP VIEW (SCALE 4/1)



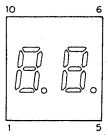
1SS123
1SS226



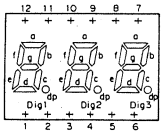
GL-3HY8 ; YELLOW
SLP281C-50 ; GREEN
TLUG163 ; GREEN
TLUG164 ; GREEN
TLUY164 ; YELLOW



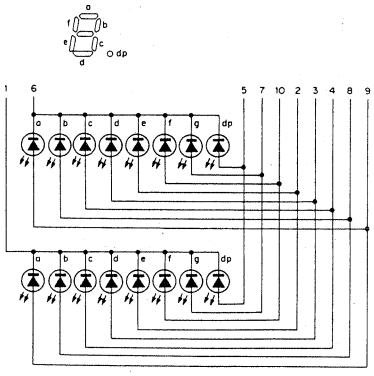
LA-301ML ; GREEN

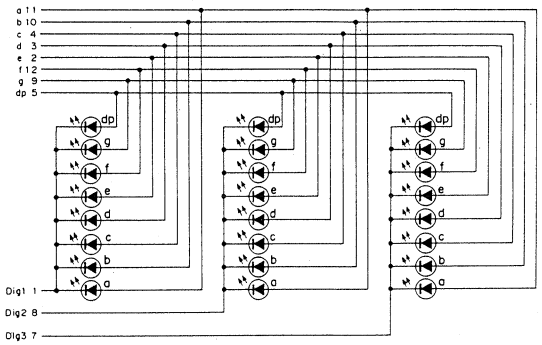


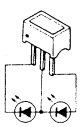
LB-202ML



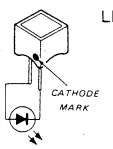
LB-203ML ; GREEN
TRIPLE 7-SEGMENT LED
– TOP VIEW –







LD-001MG ; GREEN

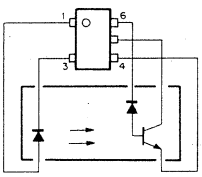


LD-101MG ; GREEN

TOP VIEW (SCALE 4/1)

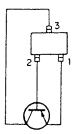
RD ? ?MB ?

TOP VIEW (SCALE 4/1)



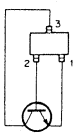
TLP112

TOP VIEW (SCALE 4/1)



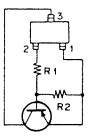
2SA1162

TOP VIEW (SCALE 4/1)



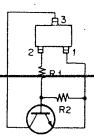
2SC2712G
2SD596

TOP VIEW (SCALE 4/1)



DTA143XK (R1 = 4.7K, R2 = 10K)

TOP VIEW (SCALE 4/1)



DTC143XK (R1 = 4.7K, R2 = 10K)

SECTION B
SEMICONDUCTOR PIN ASSIGNMENTS

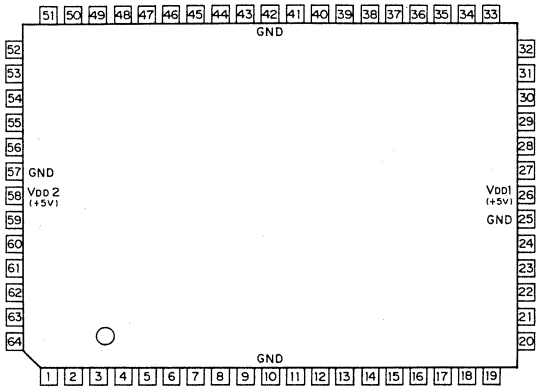
The circuit diagram of IC is obtained from the IC data book published by the manufacturer.

TYPE	PAGE
1S2835	B-2
1S2836	B-2
1S2837	B-2
1S2838	B-2
1SS123	B-2
1SS226	B-2
2SA1162	B-2
2SC2712G	B-2
2SD596	B-2
CXD1095Q	B-3
CXK5864BM-10L	B-3
DTA143XK	B-2
DTC143XK	B-2
GL-3HY8	B-2
HD64180ZF	B-4
LA-301ML	B-2
LB-202ML	B-2
LB-203ML	B-2
LD-001MG	B-2
LD-101MG	B-2
MC14053BF	B-4
MSM80C49GS	B-5
RD ? ?MB ?	B-2
SLP281C-50	B-2
SN74HC04NS	B-6
SN74HC138NS	B-6
SN74HC163NS	B-6
SN74HC245NS	B-6
SN74HC32NS	B-6
SN74HC374NS	B-6
SN74HC573NS	B-6
SN74HC86NS	B-6
TC5068BP	B-6
TC74HC4028F	B-6
TL7700CPS	B-6
TLP112	B-2
TLUG163	B-2
TLUG164	B-2
TLUY164	B-2
TMP82C79M-2	B-8
TMS27C256-25	B-9
uPD7004C	B-9

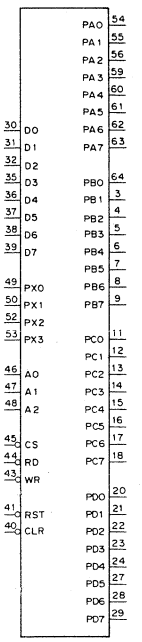
CXD1095Q (SONY) FLAT PACKAGE

C-MOS I/O PORT EXPANDER

– TOP VIEW –



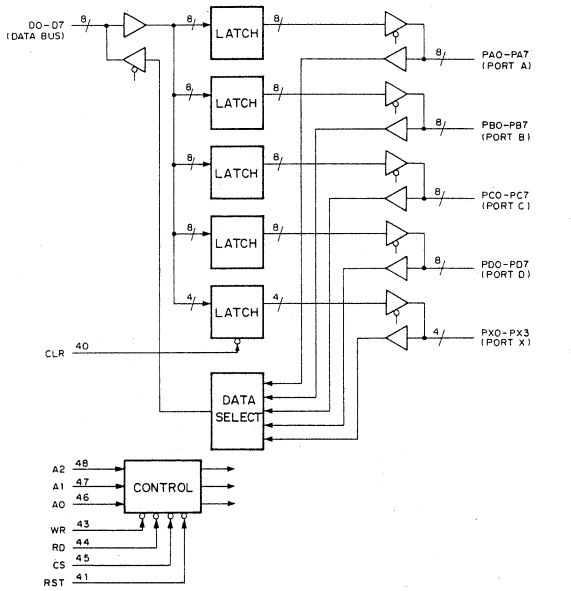
PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL
1			NC	17	O	O	PC6	33			NC	49	O	O	PX0
2			NC	18	O	O	PC7	34			NC	50	O	O	PX1
3	O	O	PB1	19			NC	35	O	O	D3	51			NC
4	O	O	PB2	20	O	O	PD0	36	O	O	D4	52	O	O	PX2
5	O	O	PB3	21	O	O	PD1	37	O	O	D5	53	O	O	PX3
6	O	O	PB4	22	O	O	PD2	38	O	O	D6	54	O	O	PA0
7	O	O	PB5	23	O	O	PD3	39	O	O	D7	55	O	O	PA1
8	O	O	PB6	24	O	O	PD4	40	O		CLR	56	O	O	PA2
9	O	O	PB7	25			GND	41	O		RST	57			GND
10			GND	26	O		VDD (+5V)	42			GND	58	O		VDD (+5V)
11	O	O	PC0	27	O	O	PD5	43	O		WR	59	O	O	PA3
12	O	O	PC1	28	O	O	PD6	44	O		RD	60	O	O	PA4
13	O	O	PC2	29	O	O	PD7	45	O		CS	61	O	O	PA5
14	O	O	PC3	30	O	O	D0	46	O		A0	62	O	O	PA6
15	O	O	PC4	31	O	O	D1	47	O		A1	63	O	O	PA7
16	O	O	PC5	32	O	O	D2	48	O		A2	64	O	O	PB0



CS	RD	WR	A2	A1	A0	MODE
0	0	1	0	0	0	PORT A → DATA BUS
0	0	1	0	0	1	PORT B → DATA BUS
0	0	1	0	1	0	PORT C → DATA BUS
0	0	1	0	1	1	PORT D → DATA BUS
0	0	1	1	0	0	PORT X → DATA BUS
0	0	1	1	0	1	——
0	0	1	1	1	0	——
0	0	1	1	1	1	——
0	1	0	0	0	0	DATA BUS → PORT A
0	1	0	0	0	1	DATA BUS → PORT B
0	1	0	0	1	0	DATA BUS → PORT C
0	1	0	0	1	1	DATA BUS → PORT D
0	1	0	1	0	0	DATA BUS → PORT X
0	1	0	1	0	1	——
0	1	0	1	1	0	DATA BUS → CTL REG.1
0	1	0	1	1	1	DATA BUS → CTL REG.2
1	X	X	X	X	X	DATA BUS ; HI-Z

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z , HIGH IMPEDANCE

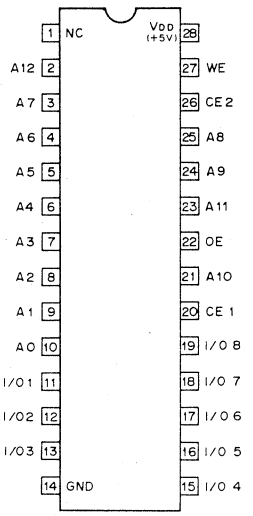
D0–D7 ; DATA BUS INPUTS/OUTPUTS
CS ; CHIP SELECT INPUT
RD ; READ STROBE INPUT
WR ; WRITE STROBE INPUT
A0–A2 ; ADDRESS INPUT
RST ; RESET INPUT
CLR ; CLEAR INPUT
PA0–PA7 ; PORT A INPUTS/OUTPUTS
PB0–PB7 ; PORT B INPUTS/OUTPUTS
PC0–PC7 ; PORT C INPUTS/OUTPUTS
PD0–PD7 ; PORT D INPUTS/OUTPUTS
PX0–PX3 ; PORT X INPUTS/OUTPUTS

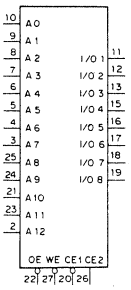


CXK5864BM-10L (SONY) (ACCESS TIME = 100nS) FLAT PACKAGE

C-MOS 64K(8192x8)-BIT STATIC RAM

– TOP VIEW –

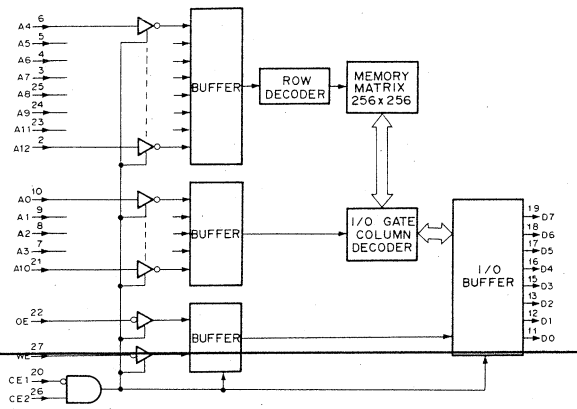




A0–A12 ; ADDRESS INPUT
CE1, CE2 ; CHIP ENABLE INPUT
I/O1–I/O8 ; DATA INPUT/OUTPUT
OE ; OUTPUT ENABLE INPUT
WE ; WRITE ENABLE INPUT

CE1	CE2	OE	WE	MODE	I/O TERMINAL
1	X	X	X	NOT SELECT	HIGH IMPEDANCE
X	0	X	X	NOT SELECT	HIGH IMPEDANCE
0	1	1	1	OUTPUT DISABLE	HIGH IMPEDANCE
0	1	0	1	READ	OUTPUT DATA
0	1	X	0	WRITE	INPUT DATA

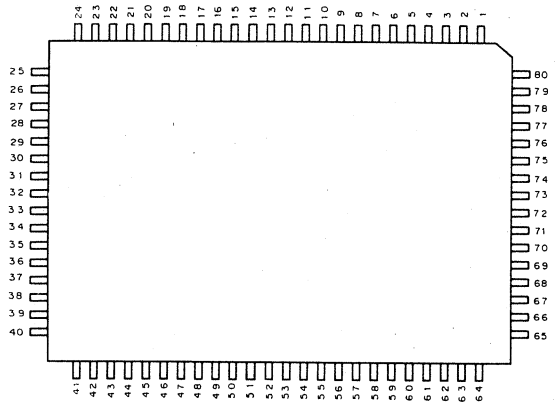
0;LOW LEVEL
1;HIGH LEVEL
X;DON'T CARE

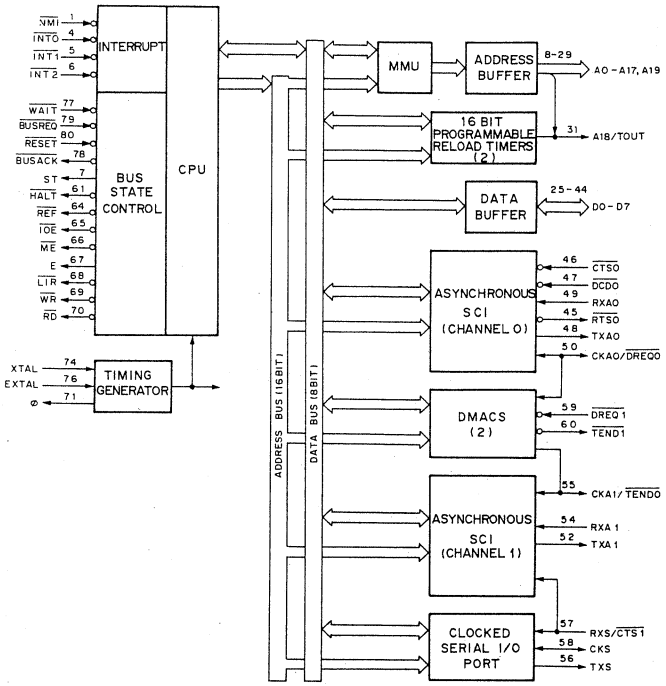


HD64180ZF (HITACHI) FLAT PACKAGE

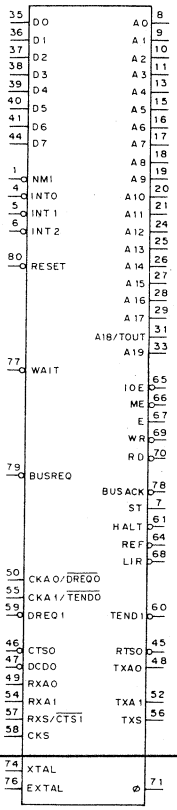
C-MOS 8-BIT MICROPROCESSOR

– TOP VIEW –





PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL
1	I	NM1	21	O	A11	41	I/O	D6	61	O	HALT
2	–	NC	22	–	NC	42	–	NC	62	–	NC
3	–	NC	23	–	NC	43	–	NC	63	–	NC
4	I	$\overline{INT0}$	24	O	A12	44	I/O	D7	64	O	$\overline{REF}$
5	I	$\overline{INT1}$	25	O	A13	45	O	$\overline{RTS0}$	65	O	$\overline{IOE}$
6	I	$\overline{INT2}$	26	O	A14	46	I	$\overline{CTS0}$	66	O	$\overline{ME}$
7	O	ST	27	O	A15	47	I	$\overline{DCD0}$	67	O	E
8	O	A0	28	O	A16	48	O	TXA0	68	O	$\overline{LIR}$
9	O	A1	29	O	A17	49	I	RXA0	69	O	$\overline{WR}$
10	O	A2	30	–	NC	50	I/O	CKA0/$\overline{DREQ0}$	70	O	$\overline{RD}$
11	O	A3	31	O	A18/TOUT	51	–	NC	71	O	ϕ
12		Vss	32		VCC	52	O	TXA1	72		Vss
13	O	A4	33	O	A19	53		TEST	73		Vss
14	–	NC	34		Vss	54	I	RXA1	74	I	XTAL
15	O	A5	35	I/O	D0	55	I/O	CKA1/$\overline{TEND0}$	75	–	NC
16	O	A6	36	I/O	D1	56	O	TXS	76	I	EXTAL
17	O	A7	37	I/O	D2	57	I	RXS/$\overline{CTS1}$	77	I	$\overline{WAIT}$
18	O	A8	38	I/O	D3	58	I/O	CKS	78	O	$\overline{BUSACK}$
19	O	A9	39	I/O	D4	59	I	$\overline{DREQ1}$	79	I	$\overline{BUSREQ}$
20	O	A10	40	I/O	D5	60	O	$\overline{TEND1}$	80	I	$\overline{RESET}$

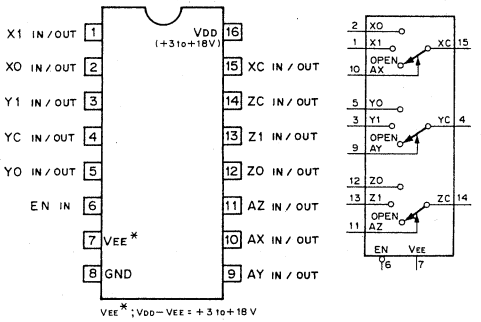


AO-A19 ; ADDRESS BUS (3-STATE)
BUSACK ; BUS ACKNOWLEDGE
BUSREQ ; BUS REQUEST
CKA0,1 ; CLOCK FOR ASYNCHRONOUS SCI CHANNEL 0,1
CKS ; CLOCK FOR SERIAL I/O PORT
CTS0,1 ; CLEAR TO SEND FOR ASYNCHRONOUS SCI CHANNEL 0,1
D0-D7 ; DATA BUS
DCD0 ; DATA CARRIER DETECT FOR ASYNCHRONOUS SCI CHANNEL 0
DREQ0,1 ; DMA REQUEST FOR CHANNEL 0,1
E ; ENABLE
EXTAL ; EXTERNAL CLOCK
INT0-2 ; INTERRUPT 0-2
IOE ; I/O ENABLE (3-STATE)
LIR ; LOAD INSTRUCTION REGISTER
ME ; MEMORY ENABLE(3-STATE)
NMI ; NON-MASKABLE INTERRUPT
RD ; READ
REF ; REFRESH
RTS0 ; REQUEST TO SEND FOR ASYNCHRONOUS SCI CHANNEL 0
RXA0,1 ; RECEIVE DATA FOR ASYNCHRONOUS SCI CHANNEL 0,1
RXS ; RECEIVE DATA FOR SERIAL I/O PORT
ST ; STATUS
TEND0,1 ; TRANSFER END FOR CHANNEL 0,1
TOUT ; TIMER OUT
TXA0,1 ; TRANSFER DATA FOR ASYNCHRONOUS SCI CHANNEL 0,1
TXS ; TRANSFER DATA FOR SERIAL I/O PORT
WR ; WRITE(3-STATE)
ø ; SYSTEM CLOCK

MC14053BF (MOTOROLA) FLAT PACKAGE

C-MOS TRIPLE 2-CHANNEL ANALOG MULTIPLEXER/DEMULTIPLEXER

– TOP VIEW –



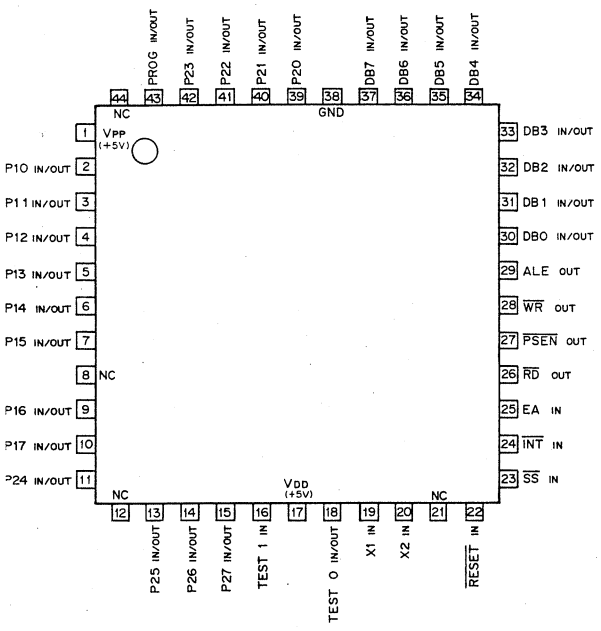
CONT. INPUTS		ON
EN	A (X,Y,Z,)	CHANNEL
0	0	0
0	1	1
1	X	OPEN

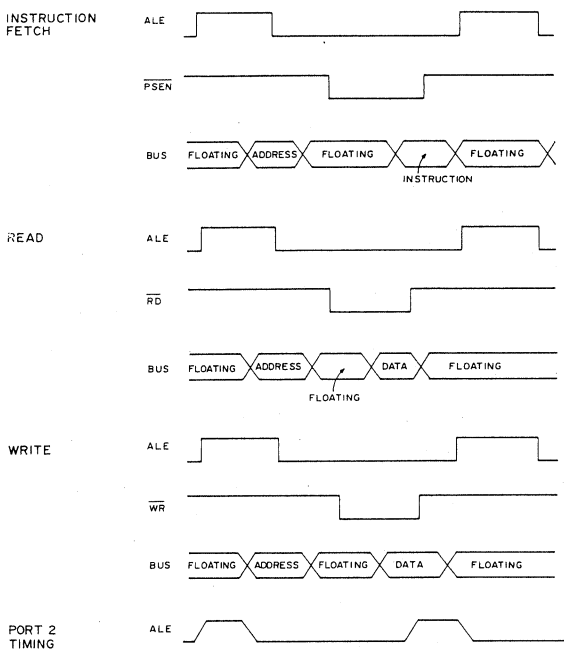
0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE.

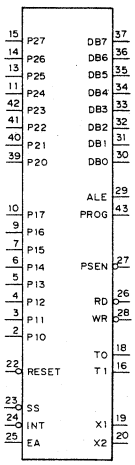
MSM80C49GS (OKI) FLAT PACKAGE

C-MOS 8-BIT MICROPROCESSOR

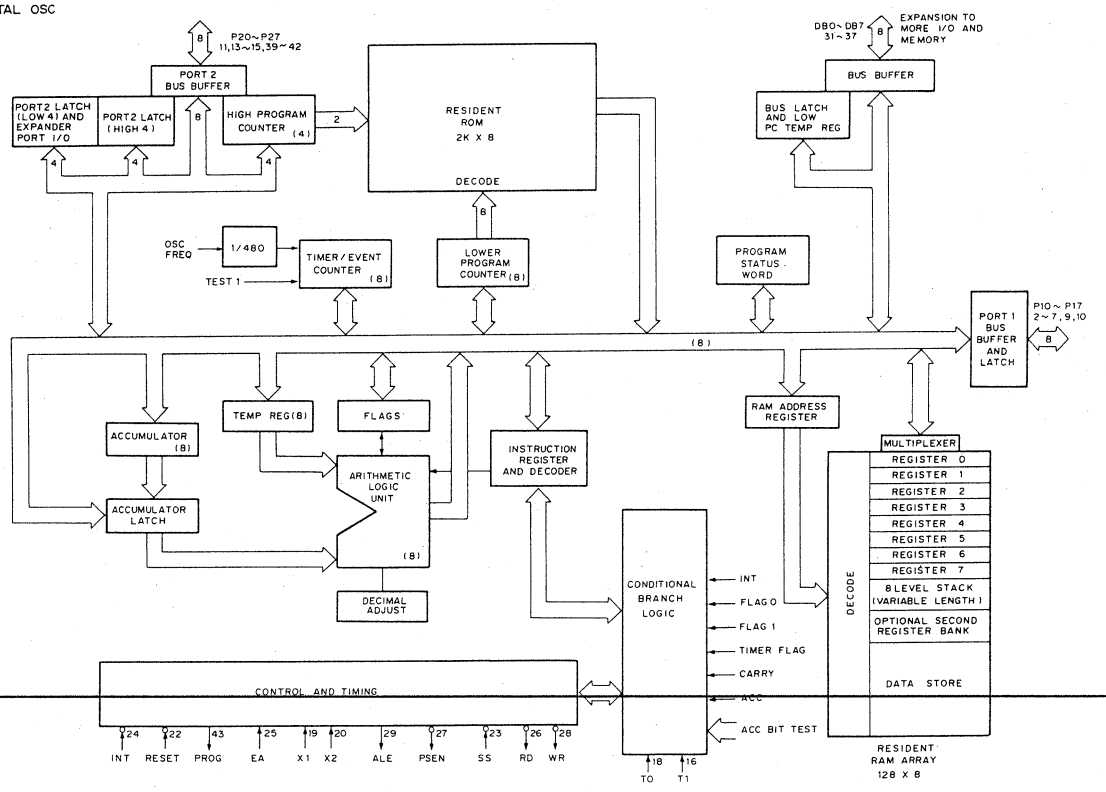
– TOP VIEW –







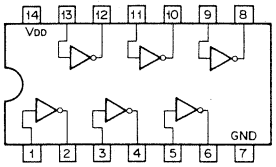
ALE ; ADDRESS LATCH ENABLE
DB0-7 ; DATA BUS
EA ; EXTERNAL ACCESS
$\overline{INT}$; INTERRUPT
P20-27 ; I/O PORT 2
P10-17 ; I/O PORT 1
PROG ; PROGRAM PULSE
$\overline{PSEN}$; PROGRAM STORE ENABLE
$\overline{RD}$; READ
$\overline{RESET}$; INITIALIZING IN
$\overline{SS}$; SINGLE STEP
TO ; TEST 0 I/O
T1 ; TEST 1 IN
Vcc ; +5V
VDD ; +5V FOR INTERNAL DATA MEMORY
$\overline{WR}$; WRITE
X1,X2 ; GRYSTAL OSC

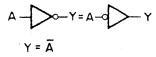


SN74HC04NS (TI) (V_{DD} = + 2 to + 6V) FLAT PACKAGE

C-MOS HEX INVERTER

– TOP VIEW –





$Y = \overline{A}$

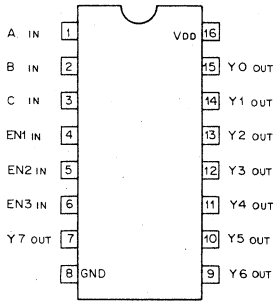
A	Y
0	1
1	0

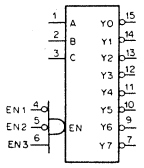
0: LOW LEVEL
1: HIGH LEVEL

SN74HC138NS (TI) (V_{DD} = + 2 to + 6V) FLAT PACKAGE

C-MOS 3-TO-8 LINE DECODER/DEMULTIPLEXER

– TOP VIEW –





INPUTS				OUTPUTS							
EN	C	B	A	Y7	Y6	Y5	Y4	Y3	Y2	Y1	Y0
0	X	X	X	1	1	1	1	1	1	1	1
1	0	0	0	1	1	1	1	1	1	1	0
1	0	0	1	1	1	1	1	1	1	0	1
1	0	1	0	1	1	1	1	1	0	1	1
1	0	1	1	1	1	1	1	0	1	1	1
1	1	0	0	1	1	1	0	1	1	1	1
1	1	0	1	1	1	0	1	1	1	1	1
1	1	1	0	1	0	1	1	1	1	1	1
1	1	1	1	0	1	1	1	1	1	1	1

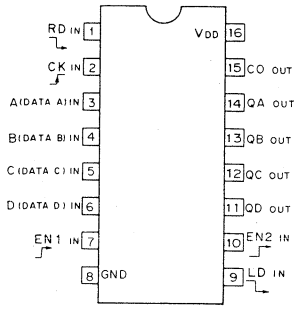
$EN = \overline{EN1} \cdot \overline{EN2} \cdot EN3$

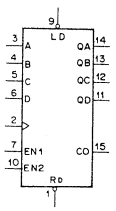
0 : LOW LEVEL
1 : HIGH LEVEL
X ; DON'T CARE

SN74HC163NS (TI) (V_{DD} = + 2 to + 6V) FLAT PACKAGE

C-MOS PRESETTABLE SYNCHRONOUS 4-BIT BINARY COUNTER

– TOP VIEW –

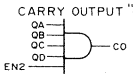




MODE SELECTION

CONTROL INPUTS				MODE
RD	LD	EN1	EN2	
0	X	X	X	RESET (SYNCHRONOUS)
1	0	X	X	PRESET (SYNCHRONOUS)
1	1	0	X	NO COUNT
1	1	X	0	NO COUNT
1	1	1	1	COUNT

CARRY OUTPUT "CO"



CO IS HIGH WHEN EN2 INPUT IS HIGH AND COUNT IS "15".

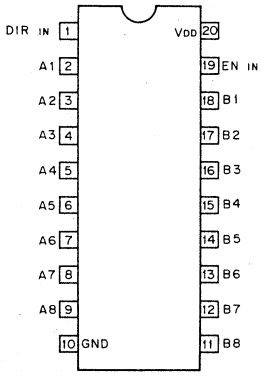
COUNT SEQUENCE

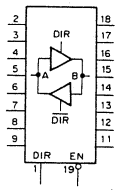
COUNT	OUTPUTS			
	QD	QC	QB	QA
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

SN74HC245NS (TI) (V_{DD} = + 2 to + 6V) FLAT PACKAGE

C-MOS BILATERAL BUS TRANSCEIVERS WITH 3-STATE OUTPUTS

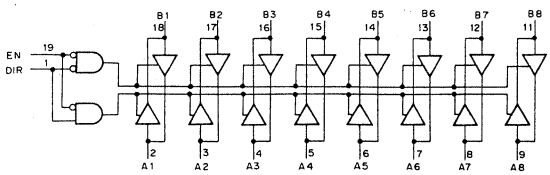
– TOP VIEW –





EN	DIR	OPERATION
0	0	B to A
0	1	A to B
1	X	HI – Z

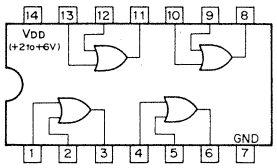
0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
HI-Z; HIGH IMPEDANCE

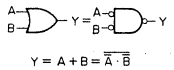


SN74HC32NS (TI) FLAT PACKAGE

C-MOS 2-INPUT OR GATE

– TOP VIEW –





$Y = A + B = \overline{\overline{A} \cdot \overline{B}}$

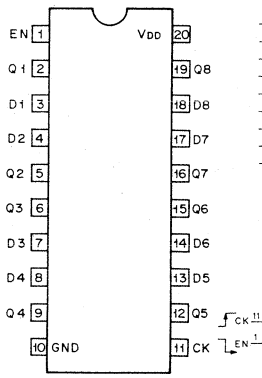
A	B	Y
0	0	0
0	1	1
1	0	1
1	1	1

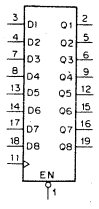
0; LOW LEVEL
1; HIGH LEVEL

SN74HC374NS (TI) (V_{DD} = + 2 to + 6V) FLAT PACKAGE

C-MOS 3-STATE OCTAL D-TYPE FLIP-FLOP

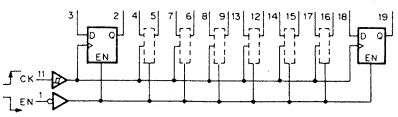
– TOP VIEW –





INPUTS			OUT
EN	D	CK	Q
0	1	↑	1
0	0	↑	0
0	X	0	Q0
1	X	X	HI-Z

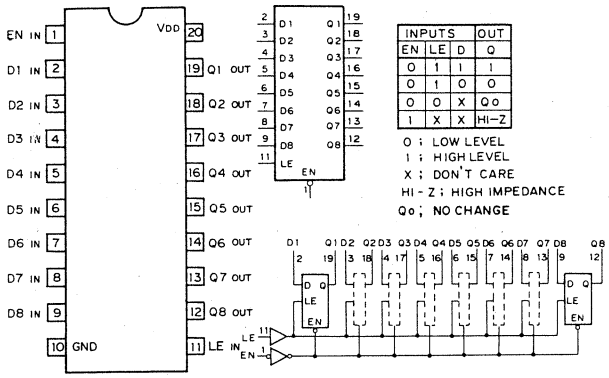
0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
HI-Z; HIGH IMPEDANCE



SN74HC573NS (TI) (V_{DD} = + 2 to + 6V) FLAT PACKAGE

C-MOS 3-STATE OUTPUTS OCTAL LATCHES

– TOP VIEW –



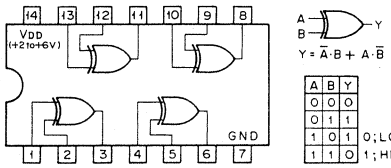
INPUTS			OUT
EN	LE	D	Q
0	1	1	1
0	1	0	0
0	0	X	Qo
1	X	X	Hi-Z

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE
Qo ; NO CHANGE

SN74HC86NS (TI) FLAT PACKAGE

C-MOS EXCLUSIVE OR GATE

– TOP VIEW –



$Y = \overline{A} \cdot B + A \cdot \overline{B}$

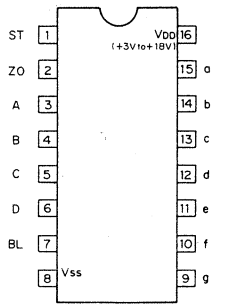
A	B	Y
0	0	0
0	1	1
1	0	1
1	1	0

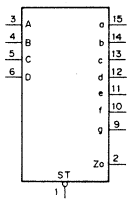
0 ; LOW LEVEL
1 ; HIGH LEVEL

TC5068BP (TOSHIBA)

C-MOS BCD-TO-SEVEN-SEGMENT LATCH/DECODER/DRIVER

– TOP VIEW –





ST ; STROBE IN
ZO ; ZERO OUT
BL ; BLANKING IN

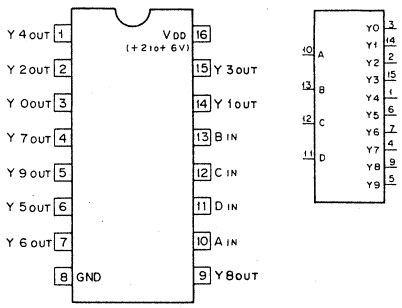
INPUT						OUTPUT(OPEN DRAIN)								DISPLAY	DECIMAL
ST	BL	D	C	B	A	a	b	c	d	e	f	g	ZERO OUT	(HEXADECIMAL)	
X	1	X	X	X	X	0	0	0	0	0	0	0	*	BLANK	
1	0	0	0	0	0	1	1	1	1	1	1	0	1	0	0
1	0	0	0	0	1	0	1	1	0	0	0	0	0	1	1
1	0	0	0	1	0	1	1	0	1	1	0	1	0	2	2
1	0	0	0	1	1	1	1	1	1	0	0	1	0	3	3
1	0	0	1	0	0	0	1	1	0	0	1	1	0	4	4
1	0	0	1	0	1	1	0	1	1	0	1	1	0	5	5
1	0	0	1	1	0	1	0	1	1	1	1	1	0	6	6
1	0	0	1	1	1	1	1	1	0	0	1	0	0	7	7
1	0	1	0	0	0	1	1	1	1	1	1	1	0	8	8
1	0	1	0	0	1	1	1	1	1	0	1	1	0	9	9
1	0	1	0	1	0	1	1	1	0	1	1	1	0	A	10
1	0	1	0	1	1	0	0	1	1	1	1	1	0	b	11
1	0	1	1	0	0	1	0	0	1	1	1	0	0	C	12
1	0	1	1	0	1	0	1	1	1	1	0	1	0	d	13
1	0	1	1	1	0	1	0	0	1	1	1	1	0	E	14
1	0	1	1	1	1	1	0	0	0	1	1	1	0	F	15
0	0	X	X	X	X	★									

X ; DON'T CARE
* ; UNDETERMINED
★ ; DEPENS UPON THE BCD CODE PREVIOUSLY APPLIED WHEN ST="H"

TC74HC4028F (TOSHIBA) FLAT PACKAGE

C-MOS BCD TO DECIMAL DECODER

– TOP VIEW –



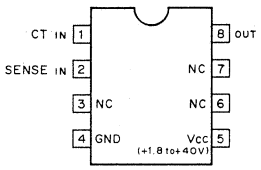
STATE	INPUTS				OUTPUTS									
	D	C	B	A	YO	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1	0	0	0	1	0	1	0	0	0	0	0	0	0	0
2	0	0	1	0	0	0	1	0	0	0	0	0	0	0
3	0	0	1	1	0	0	0	1	0	0	0	0	0	0
4	0	1	0	0	0	0	0	0	1	0	0	0	0	0
5	0	1	0	1	0	0	0	0	0	1	0	0	0	0
6	0	1	1	0	0	0	0	0	0	0	1	0	0	0
7	0	1	1	1	0	0	0	0	0	0	0	1	0	0
8	1	X	X	0	0	0	0	0	0	0	0	0	1	0
9	1	X	X	1	0	0	0	0	0	0	0	0	0	1

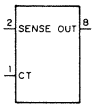
0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

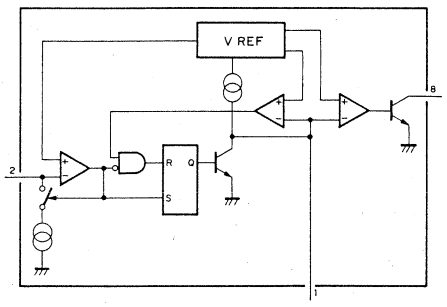
TL7700CPS (TI) FLAT PACKAGE

VARIABLE SUPPLY VOLTAGE SUPERVISOR

– TOP VIEW –



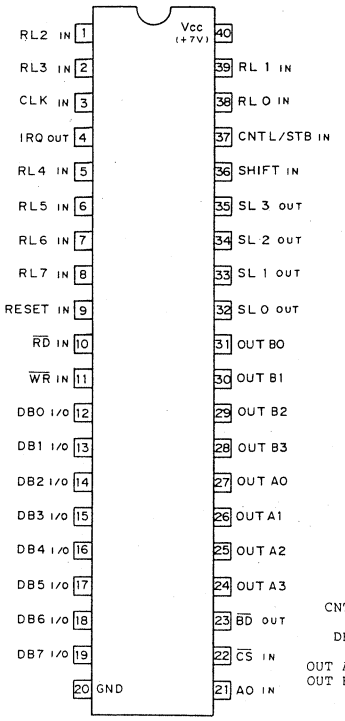


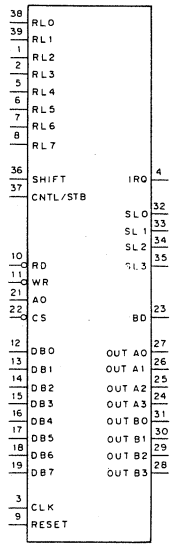


TMP82C79M-2 (TOSHIBA) FLAT PACKAGE

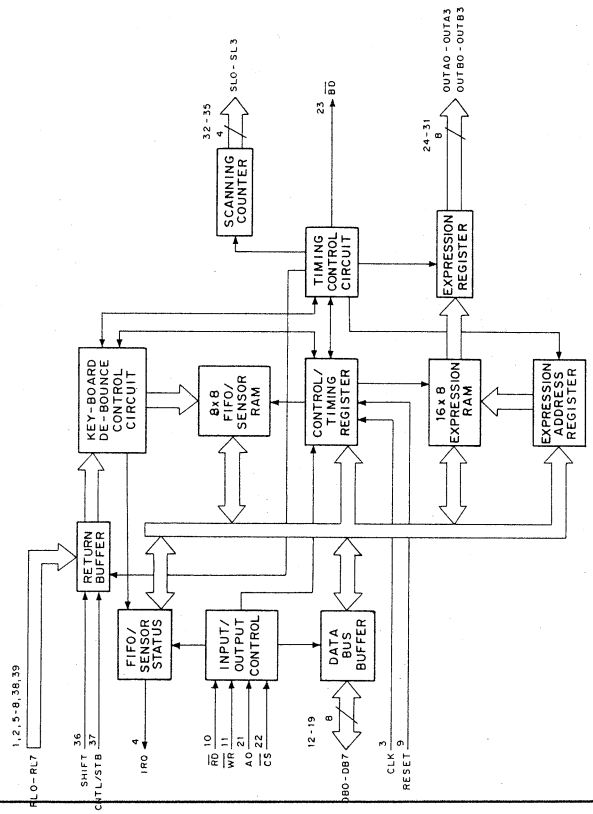
C-MOS PROGRAMABLE KEY-BOARD/DISPLAY INTERFACE DEVICE

– TOP VIEW –

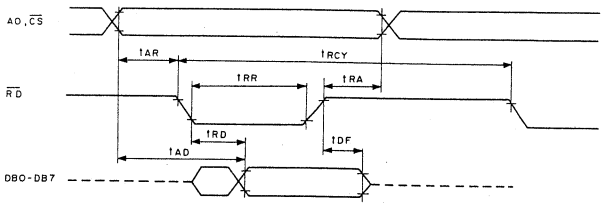




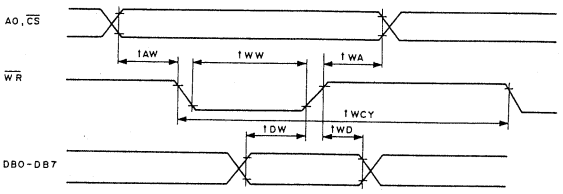
AO ; COMMAND/DATA CONTROL INPUT
$\overline{BD}$; DISPLAY BLANKING OUTPUT
CLK ; CLOCK INPUT
CNTL/$\overline{STB}$; CONTROL/STROBE INPUT
$\overline{CS}$; CHIP SELECT INPUT
DB0-DB7 ; DATA BUS INPUT/OUTPUT
IRQ ; INTERRUPT REQUEST OUTPUT
OUT A0-A3 ; 16x4 BIT EXPRESSION REFRESH REGISTER
OUT B0-B3
$\overline{RD}$; READ STROBE INPUT
RESET ; RESET INPUT
RL0-RL7 ; RETURN LINE INPUT
SHIFT ; SHIFT INPUT
SL0-$\overline{SL3}$; SCANNING LINE OUTPUT
$\overline{WR}$; WRITE STROBE INPUT



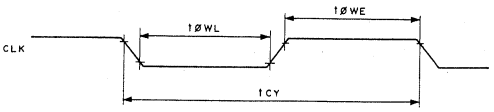
READ



WRITE

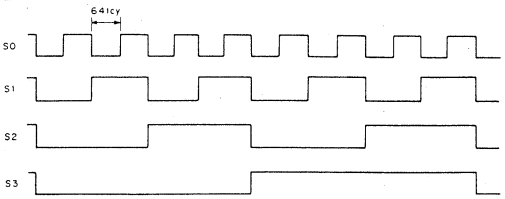


CLOCK

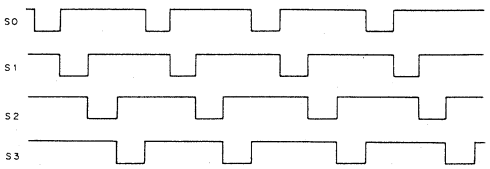


SCANNING

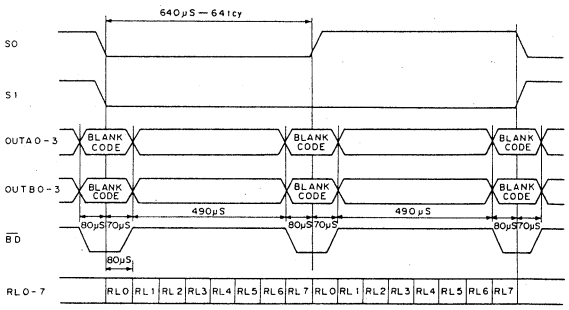
ENCODE



DECODE



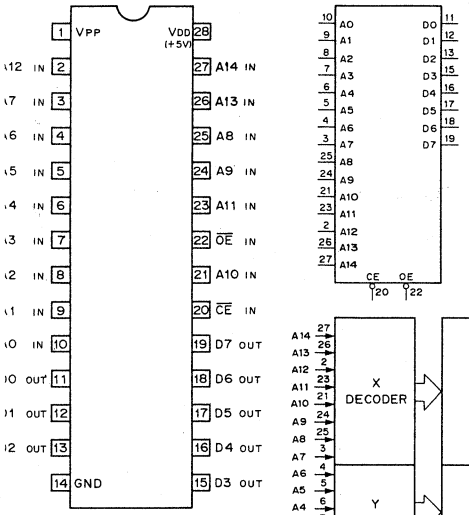
EXPRESSION

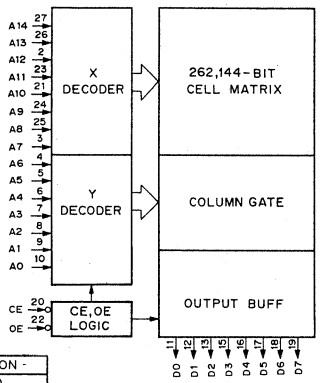


MS27C256-25 (TI) (ACCESS TIME = 250nS)

-MOS 256K(32Kx8)-BIT ERASABLE PROM WITH 3-STATE OUTPUTS

- TOP VIEW -

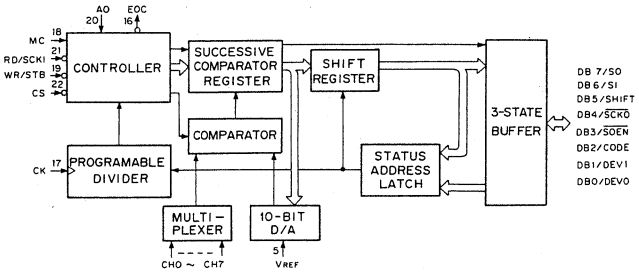




\0 – A14 ; ADDRESS INPUT
E ; CHIP ENABLE INPUT
0 – D7 ; DATA OUTPUT
E ; OUTPUT ENABLE INPUT
PP ; PROGRAM POWER SUPPLY

An	$\overline{CE}$	$\overline{OE}$	V_{PP}	Dn	FUNCTION
An	0	0	+ 5V	D_{OUT}	READ
An	0	1	+ 5V	HI-Z	OUTPUT DISABLE
X	1	X	+ 5V	HI-Z	STANDBY
An	0	1	+ 21V	D_{IN}	PGM
An	0	0	+ 21V	D_{OUT}	PGM VERIFY
X	1	1	+ 21V	HI-Z	PGM INH

0 : LOW LEVEL
1 : HIGH LEVEL
X : DON'T CARE
HI-Z : HIGH IMPEDANCE



MC	MODE
0	SERIAL
1	PARALLEL

PARALLEL MODE

$\overline{CS}$	$\overline{WR}$	$\overline{RD}$	AO	MODE
1	X	X	X	HIGH IMPEDANCE
0	1	1	X	HIGH IMPEDANCE
0	0	1	0	*1 ANALOG CHANNEL SELECT
0	0	1	1	*2 CODE SELECT/ *3 CLOCK RATE SELECT
0	1	0	0	*4 LOW-BYTE DATA OUTPUT
0	1	0	1	*4 HIGH-BYTE DATA OUTPUT
0	0	0	X	INHIBIT

0 ; LOW LEVEL X : DON'T CARE
1 ; HIGH LEVEL

*1 ANALOG CHANNEL

SEL2	SEL1	SEL0	MPX CHAN.
0	0	0	CH0
0	0	1	CH1
0	1	0	CH2
0	1	1	CH3
1	0	0	CH4
1	0	1	CH5
1	1	0	CH6
1	1	1	CH7

*2 CODE SELECT

CODE	CODE SELECT
0	BINARY DATA
1	2'S COMPLEMENT DATA

*3 CLOCK RATE SELECT

DEV1	DEV 0	CLOCK RATE
0	0	1
0	1	1/2
1	0	1/4
1	1	1/8

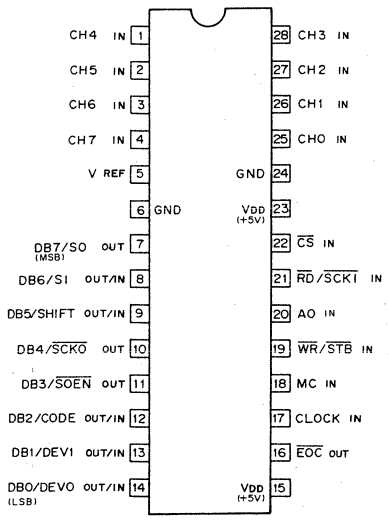
*4 LOW/HIGH-BYTE DATA

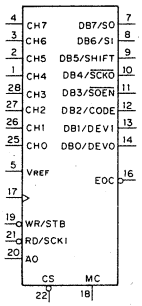
	DB7	DB 6	DB5	DB4	DB3	DB2	DB1	DB 0
HIGH-BYTE	MSB	2ND	3RD	4TH	5TH	6TH	7TH	8TH
LOW- BYTE	9TH	0	0	0	0	0	0	0

μPD7004C (NEC)

-MOS 10-BIT SUCCESSIVE COMPARATOR TYPE A/D CONVERTER

- TOP VIEW -





AO ; CONTROL ADDRESS INPUT
CH0~7 ; ANALOG INPUT
CODE ; CODE SELECT (2'S COMPLEMENT/ BINARY) INPUT
CS ; CHIP SELECT INPUT
DB0~7 ; DATA BUS INPUT/OUTPUT
DEV0, DEV1 ; CLOCK RATE SELECT INPUT
EOC ; CONVERSION ENDING SIGNAL OUTPUT
MC ; MODE SELECT INPUT
RD ; READ SIGNAL INPUT
SCKI ; SERIAL CLOCK INPUT
SCKO ; SERIAL CLOCK OUTPUT
SHIFT ; SHIFT SELECT (LSB FIRST/ MSB FIRST)
SI ; SERIAL INPUT
SO ; SERIAL OUTPUT
SOEN ; SERIAL OUTPUT ENABLE OUTPUT
STB ; ADDRESS WRITE STROBE SIGNAL INPUT
WR ; WRITE SIGNAL INPUT

SECTION C
SPARE PARTS

PARTS INFORMATION

1. **Safety Related Component Warning**

   Components indentified by shading marked with ⚠ on the schematic diagrams, exploded views and electrical spare parts list are critical to safe operation. Replace these components with Sony parts whose parts numbers appear as shown in this manual or in service manual supplements published by Sony.

2. Replace Parts that are supplied from Sony Parts Center can sometimes have different shape and external appearance than what are actually used in equipment. This is due to **"accommodating the improved parts and/or engineering changes" or "standardization of genuine parts."**

   · This manual 's exploded view and electrical spare parts lists are indicating the parts numbers of "the standardized genuine parts at present."

   · Regarding engineering parts and diagrams changes in our engineering department, refer to Sony service bulletins and service manual supplements.

3. **The parts marked with "S" in the SP column** of the exploded views and electrical spare parts list are normally required for routine service work. Orders for parts marked with "O" will be processed, but allow for additional delivery time.

4. Item with no parts number and/or no description are not stocked because they are seldom required for routine service.

5. Regarding engineering parts changes in our engineering department, refer to SECTION D "CHANGED PARTS".

6. Abbreviation

REF.NO.	DESCRIPTION	REF.NO.	DESCRIPTION	REF.NO.	DESCRIPTION
BT	BATTERY	F	FUSE	RB, RP	RESISTOR BLOCK
BZ	BUZZER	FB	FERRITE BEAD	RY	RELAY
C	CAPACITOR	FL	FILTER	RV	VARIABLE RESISTOR
CF	CERAMIC FILTER	IC	IC	S	SWITCH
CN	CONNECTOR	L	INDUCTOR	T	TRANSFORMER
CP	COMBINATION PARTS	LV	VARIABLE INDUCTOR	TH	THERMISTOR
CV	VARIABLE CAPACITOR	PL	PILOT LAMP	TM	TIMER
D	DIODE	Q	TRANSISTOR	VDR	VARISTOR
DL	DELAY LINE	R	RESISTOR	X	OSCILLATOR

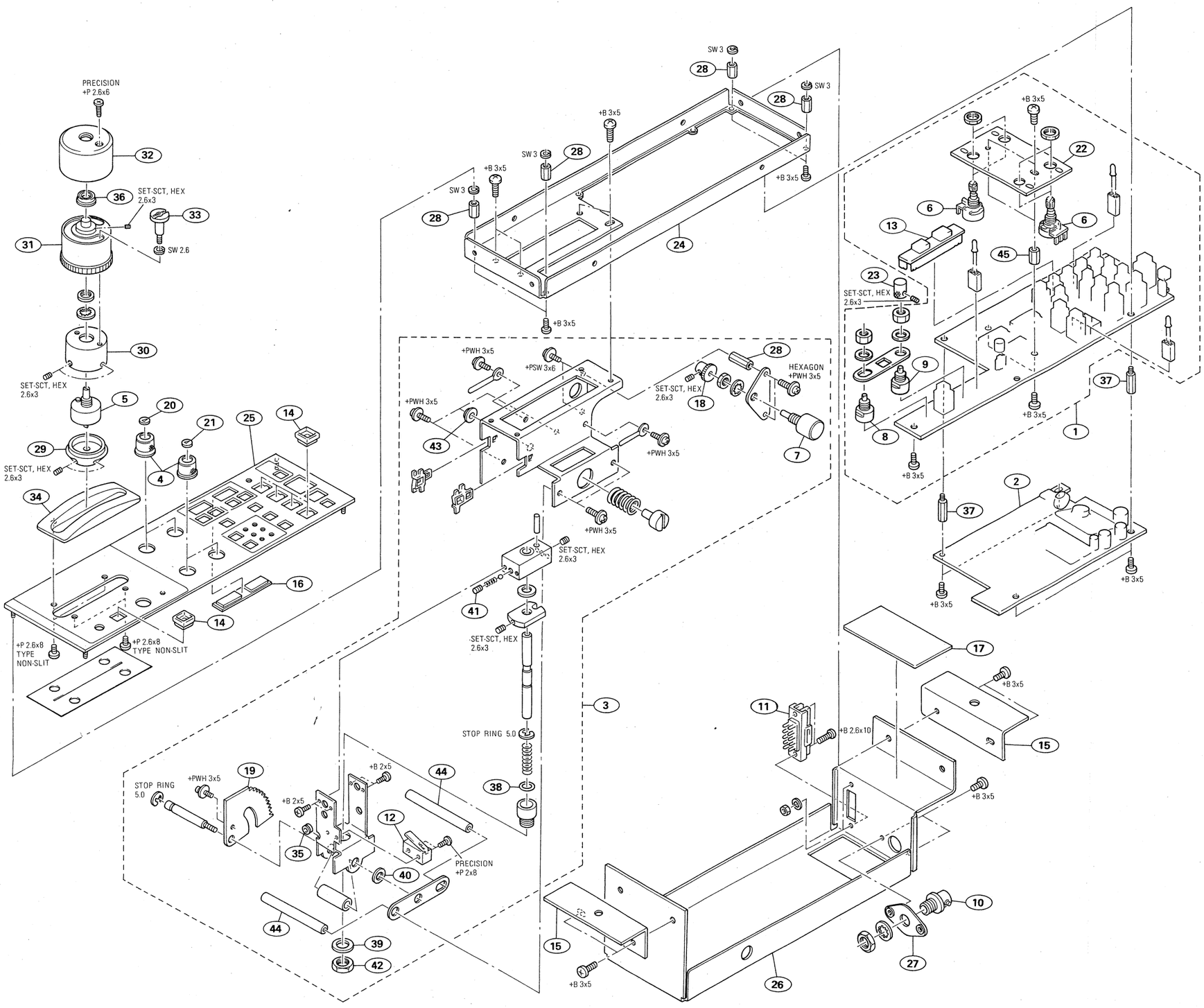
All capacitors are in micro farads unless otherwise specified.
All inductors are in micro henries unless otherwise specified.
All resistors are in ohms.

EXPLODED VIEW

RCP-3710

No.	Part No.	SP	Description
1	A-7515-056-A	o	MOUNTED CIRCUIT BOARD, VR-96
2	A-7515-057-A	o	MOUNTED CIRCUIT BOARD, MPU-52
3	A-7612-369-A	o	JOY STICK ASSY
4	X-2355-502-1	s	KNOB ASSY, CONTROL
5	1-224-981-31	s	RES, VAR, CERMET 5K "MASTER BLACK"
6	1-230-138-00	s	RES, VAR, CARBON 5K "WHITE" "BLACK"
7	1-230-817-11	s	RES, VAR, CARBON 5K "IRIS"
8	1-237-955-11	s	RES, VAR, CARVON 10K "SENS"
9	1-238-293-11	s	RES, VAR, CARBON 10K "COARSE"
10	1-561-795-00	s	SOCKET, CONNECTOR 6P "PREVIEW"
11	1-564-968-11	s	CONNECTOR, MULTI (SQUARE) 16P "CCU"
12	1-570-504-11	s	SWITCH, MICRO "LOCK"
13	1-632-782-11	o	PRINTED CIRCUIT BOARD, LED-97
14	2-141-006-01	o	GUARD (SQUARE 6), SWITCH
15	2-141-007-01	o	BRACKET (1), RACK
16	2-141-008-01	o	COVER (1), LED
17	2-141-009-01	o	INSULATOR (1)
18	2-141-013-01	o	GEAR (A), IRIS
19	2-141-014-01	o	GEAR (B), IRIS
20	2-141-015-01	o	PLATE, COLOR
21	2-141-015-21	o	PLATE, COLOR
22	2-141-016-01	o	PLATE (J1), FIXED, RV
23	2-141-017-01	s	KNOB, RV
24	2-141-020-01	o	CHASSIS (J1), SUB
25	2-141-023-01	o	PANEL (J1), CONTROL
26	2-141-024-01	o	COVER (1)
27	2-249-395-02	o	NUT, PLATE, 4P
28	2-280-622-41	o	SUPPORT (M3), HEXAGON
29	2-356-547-01	o	TUBE, LEVER FIXED
30	2-356-558-01	o	TUBE, FIXED, VR
31	2-356-559-01	o	TUBE, ADJUSTMENT
32	2-356-560-01	o	TUBE, COVER
33	2-356-561-01	o	SHAFT, FIXED, COVER
34	2-356-571-01	o	ESCUTCHEON, LEVER
35	3-306-006-00	s	CUSHION, MOTOR
36	3-657-810-00	s	BEARING (LF1280ZZ), BALL
37	3-657-864-00	o	SUPPORT, DP
38	3-672-251-00	s	RING (M4), O
39	3-692-963-01	s	WASHER (A)
40	3-701-444-21	s	WASHER, 6
41	3-701-510-00	s	SET SCREW, DOUBLE POINT 4X4
42	3-712-653-01	s	NUT (M8), TUBE
43	4-812-554-00	s	WASHER
44	4-870-261-00	o	SUPPORT
45	4-876-607-21	o	COLLAR (E), PLATE, JACK

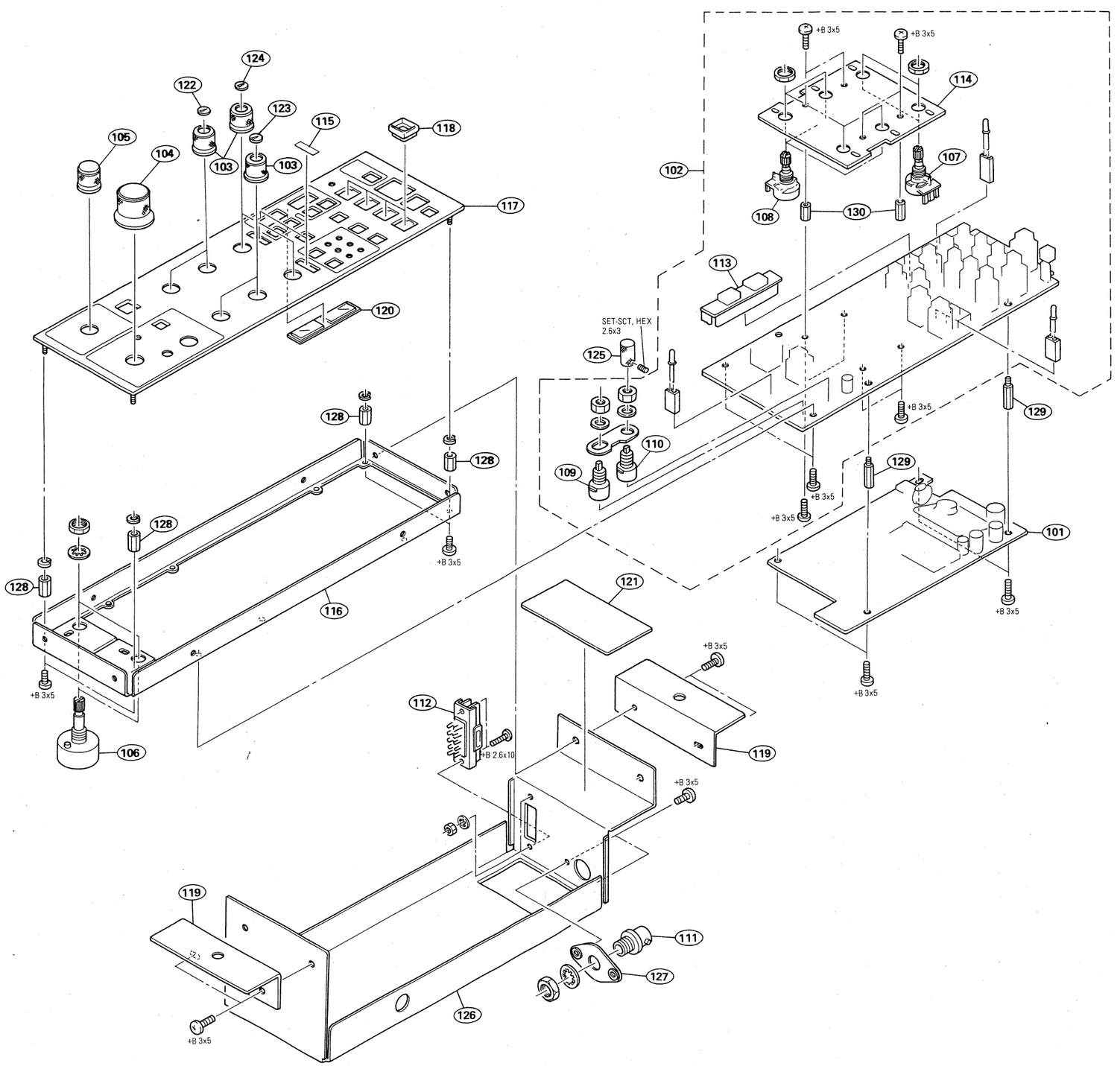
RCP-3710



C-3

C-4

RCP-3711

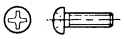

124
122
123
115
118
105
104
103
103
117
120
128
128
128
128
+B 3x5
116
106
+B 3x5
121
+B 3x5
112
+B 2.6x10
119
+B 3x5
119
111
127
126
+B 3x5
+B 3x5
114
102
107
108
130
113
SET-SCT, HEX 2.6x3
125
110
109
+B 3x5
+B 3x5
129
129
101
+B 3x5
+B 3x5

RCP-3711

No.	Part No.	SP	Description
101	A-7515-057-A	o	MOUNTED CIRCUIT BOARD, MPU-52
102	A-7515-058-A	o	MOUNTED CIRCUIT BOARD, VR-97
103	X-2355-502-1	s	KNOB ASSY, CONTROL
104	X-3651-342-0	s	KNOB ASSY, CONTROL
105	X-3670-503-0	s	KNOB ASSY, CONTROL
106	1-224-981-00	s	RES, VAR, CERMET 5K "IRIS" "MASTER BLACK"
107	1-230-137-00	s	RES, VAR, CARBON 5K "DETAIL" "WHITE" "BLACK"
108	1-230-138-00	s	RES, VAR, CARBON 5K "GAMMA" "WHITE" "BLACK"
109	1-237-955-11	s	RES, VAR, CARBON 10K "SENS"
110	1-238-293-11	s	RES, VAR, CARBON 10K "COARSE"
111	1-561-795-00	s	SOCKET, CONNECTOR 6P "PREVIEW"
112	1-564-968-11	s	CONNECTOR, MULTI (SQUARE) 16P "CCU"
113	1-632-782-11	o	PRINTED CIRCUIT BOARD, LED-97
114	2-141-001-01	o	PLATE (D1), FIXED, RV
115	2-141-002-01	o	LABEL, FUNCTION
116	2-141-004-01	o	CHASSIS (D1), SUB
117	2-141-005-01	o	PANEL (D1), CONTROL
118	2-141-006-01	o	GUARD (SQUARE 6), SWITCH
119	2-141-007-01	o	BRACKET (1), RACK
120	2-141-008-01	o	COVER (1), LED
121	2-141-009-01	o	INSULATOR (1)
122	2-141-015-01	o	PLATE, COLOR
123	2-141-015-21	o	PLATE, COLOR
124	2-141-015-31	o	PLATE, COLOR
125	2-141-017-01	s	KNOB, RV
126	2-141-024-01	o	COVER (1)
127	2-249-395-02	o	NUT, PLATE, 4P
128	2-280-622-41	o	SUPPORT (M3), HEXAGON
129	3-657-864-00	o	SUPPORT, DP
130	4-876-607-21	o	COLLAR (E), PLATE, JACK

SCREWS

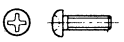
+B
Cr-N



7-621-□□□-□□

SIZE	Parts No.
2 x 3	772-08
x 4	772-18
x 5	771-06
x 6	772-38
x 8	772-48
x 10	772-58
x 12	772-68
x 14	772-78
x 16	772-88
x 20	–
2.6 x 3	775-08
x 4	773-86
x 5	770-87
x 6	770-67
x 8	770-99
x 10	773-87
x 12	775-68
x 14	775-78
x 16	775-88
x 20	773-91

+B
Cr-N



7-682-□□□-□□

SIZE	Parts No.
3 x 3	144-01
x 4	145-01
x 5	146-01
x 6	147-01
x 8	148-01
x 10	149-01
x 12	150-01
x 14	151-01
x 16	152-01
x 20	153-01
4 x 4	158-01
x 5	159-01
x 6	160-01
x 8	161-01
x 10	162-01
x 12	163-01
x 14	164-01
x 16	165-01
x 20	166-01
5 x 8	174-01
x 10	175-01
x 12	176-01
x 14	177-01
x 16	178-01
x 20	179-01

+PSW
Czn-N

7-682-□□□-□□

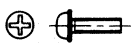
SIZE	Parts No.
3 x 6	947-01
x 8	948-01
x 10	949-01
x 12	950-01
x 14	951-01
x 16	952-01
x 20	953-01
x 25	954-01
x 30	955-01
x 35	956-01
x 40	957-01
4 x 8	961-01
x 10	962-01
x 12	963-01
x 14	964-01
x 16	965-01
x 20	966-01
x 25	967-01
x 30	968-01
x 35	969-01
x 40	970-01

PRECISION +P
Bzn-N

7-627-□□□-□□

SIZE	Parts No.
1.7 x 1.6	552-18
x 1.8	–
x 2	552-28
x 2.2	–
x 2.5	552-08
x 2.8	–
x 3	552-38
x 3.5	552-78
x 4	552-48
x 4.5	–
x 5	552-58
x 5.5	–
x 6	–
2 x 1.8	554-38
x 2	553-18
x 2.2	–
x 2.5	553-28
x 2.8	554-58
x 3	553-38
x 3.5	554-18
x 4	553-48
x 4.5	553-58
x 5	554-28
x 5.5	–
x 6	553-68
x 7	553-88
x 8	553-98
x 10	553-78
2.6 x 2.8	556-08
x 3	–
x 3.5	556-28
x 4	556-38
x 4.5	556-48
x 5	556-58
x 5.5	–
x 6	556-78
x 7	–
x 8	–
x 9	–
x 10	–

+PWH



7-682-□□□-□□

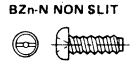
SIZE	Parts No.
2.6 x 4	
x 5	902-11
x 6	902-21
x 8	902-31
x 10	
x 12	902-51
x 14	
3 x 5	903-01
x 6	903-11
x 8	903-21
x 10	903-31
x 12	903-41
x 14	
4 x 6	904-01
x 8	904-11
x 10	904-21
x 12	904-31
x 14	904-41
x 16	
x 20	

HEXAGON SET SCREW
(WP)
SNCM6-PD

7-621-□□□-□□

SIZE	Parts No.
2.6 x 3	734-09
2.6 x 4	735-09
2.6 x 5	736-09
2.6 x 6	737-09
2.6 x 8	

TOTSU P
BZn-N NON SLIT



7-685-□□□-□□

SIZE	Parts No.
2 x 4	102-19
2 x 5	103-19
2 x 6	104-19
2 x 8	105-19
2 x 10	106-19
2 x 12	107-19
2.6 x 4	131-19
2.6 x 5	132-19
2.6 x 6	133-19
2.6 x 8	134-19
2.6 x 10	135-19
2.6 x 12	136-19
2.6 x 14	137-19
2.6 x 16	138-19
3 x 5	144-19
3 x 6	145-19
3 x 8	146-19
3 x 10	147-19
3 x 12	148-19
3 x 14	149-19
3 x 16	150-19
3 x 18	
3 x 20	151-19
3 x 25	152-19
3 x 30	153-19
3 x 35	154-19
3 x 40	155-19
3 x 58	
4 x 6	158-19
4 x 8	159-19
4 x 10	160-19
4 x 12	161-19
4 x 14	162-19
4 x 16	163-19
4 x 20	164-19
4 x 25	165-19
4 x 30	166-19
4 x 35	167-19

'U-52 BOARD

ef. No. Q'ty	Part No.	SP	Description
)c	A-7515-057-A	o	MOUNTED CIRCUIT BOARD, "MPU-52"
)c	1-410-948-11	s	INDUCTOR 100uH
l	1-131-345-00	s	TANTALUM 0.47uF 10% 35V
2	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
3	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
4	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
5	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
6	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
7	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
8	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
9	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
10	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
11	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
12	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
13	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
14	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
15	1-163-097-00	s	CERAMIC CHIP 15PF 5% 50V
16	1-163-097-00	s	CERAMIC CHIP 15PF 5% 50V
17	1-163-129-00	s	CERAMIC CHIP 330PF 5% 50V
18	1-124-484-11	s	ELECT 220uF 20% 35V
19	1-124-472-11	s	ELECT 470uF 20% 10V
20	1-124-472-11	s	ELECT 470uF 20% 10V
21	1-127-515-11	s	ELECT(SOLID) 47uF 20% 10V
22	1-163-038-00	s	CERAMIC CHIP 0.1uF 25V
23	1-126-157-11	s	ELECT 10uF 20% 6.3V Ser.No 10401 - (RCP-3710) 10201 - (RCP-3711)
24	1-126-157-11	s	ELECT 10uF 20% 6.3V Ser.No 10401 - (RCP-3710) 10201 - (RCP-3711)
N1	1-566-404-11	o	CONNECTOR, 28P, MALE
N2	1-566-391-11	o	CONNECTOR 12P
N3	1-506-473-11	o	CONNECTOR, 8P, MALE
1	8-719-800-76	s	DIODE 1SS123
2	8-719-800-76	s	DIODE 1SS123
3	8-719-800-76	s	DIODE 1SS123
4	8-719-800-76	s	DIODE 1SS123
5	8-719-800-76	s	DIODE 1SS123
6	8-719-800-76	s	DIODE 1SS123
7	8-719-800-76	s	DIODE 1SS123
8	8-719-800-76	s	DIODE 1SS123
9	8-719-800-76	s	DIODE 1SS123
10	8-719-106-70	s	DIODE RD12M-B1
B1	1-535-178-00	s	RES, FERRITE
C1	8-759-918-65	s	IC TL7700CPS
C2	8-759-008-48	s	IC MC74HC86F
C3	8-759-926-49	s	IC SN74HC245NS
C4	8-759-926-67	s	IC SN74HC374NS
C5	8-759-926-23	s	IC SN74HC163NS
C6	8-759-925-85	s	IC SN74HC32NS
C7	8-759-926-11	s	IC SN74HC138NS
C8	8-752-328-19	s	IC CXK5864BM-10L
C9	8-759-009-07	s	IC MC14053BF
C10	8-759-106-58	s	IC UPD7004C
C11	8-759-792-73	s	IC 27C256A-RCP371V1.04
C12	8-759-321-84	s	IC HD64180Z8
C13	8-759-938-68	s	IC CXD1095Q

(MPU-52 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC14	8-759-971-23	s	IC MSM80C49-757GS-K
IC15	1-466-254-11	s	CONVERTER UNIT, DC-DC
JR1	1-216-295-00	s	METAL CHIP 0 5% 1/10W
L1	1-410-948-11	s	INDUCTOR 100MH
PH1	8-719-820-86	s	TLP112
Q1	8-729-271-23	s	TRANSISTOR 2SC2712
Q2	8-729-216-22	s	TRANSISTOR 2SA1162
Q3	8-729-216-22	s	TRANSISTOR 2SA1162
Q4	8-729-271-23	s	TRANSISTOR 2SC2712
Q5	8-729-271-23	s	TRANSISTOR 2SC2712
Q6	8-729-271-23	s	TRANSISTOR 2SC2712
R1	1-216-079-00	s	METAL CHIP 18K 5% 1/10W
R2	1-216-057-00	s	METAL CHIP 2.2K 5% 1/10W
R3	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R4	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R5	1-216-057-00	s	METAL CHIP 2.2K 5% 1/10W
R6	1-216-022-00	s	METAL CHIP 75 5% 1/10W
R7	1-216-022-00	s	METAL CHIP 75 5% 1/10W
R8	1-216-025-00	s	METAL CHIP 100 5% 1/10W
R9	1-216-025-00	s	METAL CHIP 100 5% 1/10W
R10	1-216-025-00	s	METAL CHIP 100 5% 1/10W
R11	1-216-025-00	s	METAL CHIP 100 5% 1/10W
R12	1-216-025-00	s	METAL CHIP 100 5% 1/10W
R13	1-216-025-00	s	METAL CHIP 100 5% 1/10W
R14	1-216-025-00	s	METAL CHIP 100 5% 1/10W
R15	1-216-025-00	s	METAL CHIP 100 5% 1/10W
R16	1-216-025-00	s	METAL CHIP 100 5% 1/10W
R17	1-216-025-00	s	METAL CHIP 100 5% 1/10W
R18	1-216-025-00	s	METAL CHIP 100 5% 1/10W
R19	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R20	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R21	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R22	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R23	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R24	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R25	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R26	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R27	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R28	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R29	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R30	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R31	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R32	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R33	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R34	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R35	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R36	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R37	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R38	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R39	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R40	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R41	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R42	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R43	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R44	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R45	1-216-085-00	s	METAL CHIP 33K 5% 1/10W

(MPU-52 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R46	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R47	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R48	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R49	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R50	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R51	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R52	1-216-085-00	s	METAL CHIP 33K 5% 1/10W
R53	1-216-089-00	s	METAL CHIP 47K 5% 1/10W
R54	1-216-097-00	s	METAL CHIP 100K 5% 1/10W
R55	1-216-105-00	s	METAL CHIP 220K 5% 1/10W
S1	1-571-967-11	s	SWITCH, DIP (PIANO TYPE)
X1	1-527-941-00	s	10.944MHz

VR-96 BOARD "RCP-3710 ONLY"

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-7515-056-A	o	MOUNTED CIRCUIT BOARD, "VR-96"
2pcs	1-563-521-11	o	CONNECTOR, 20P, FEMALE
2pcs	1-566-474-11	o	PIN, SOCKET 2P Ser.No 10401 -
2pcs	1-566-475-11	o	PIN, SOCKET 3P
1pc	1-632-782-11	o	PRINTED CIRCUIT BOARD, "LED-97" Ser.No 10001 - 10400
1pc	1-632-782-12	o	PRINTED CIRCUIT BOARD, "LED-97" Ser.No 10401 -
1pc	1-634-921-11	o	PRINTED CIRCUIT BOARD, "LED-107" Ser.No 10401 -
1pc	2-141-016-01	o	PLATE (J1), FIXED, RV
1pc	2-141-017-01	s	KNOB, RV
2pcs	4-876-607-21	o	COLLAR (E), PLATE, JACK
1pc	7-621-734-09	s	SET-SCT,HEX. 2.6X3
4pcs	7-682-546-04	s	SCREW +B 3X5
C1	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
C2	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
C3	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
C4	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
C5	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
C6	1-127-491-00	s	ELECT SOLID 20uF 20%
CN1	1-566-404-11	o	CONNECTOR, 28P, MALE
CN2	1-566-391-11	o	CONNECTOR 12P
CN3	1-506-471-11	o	CONNECTOR, 6P, MALE
CN4	1-506-469-11	o	CONNECTOR, 4P, MALE
D1	8-719-104-34	s	DIODE 1S2836
D2	8-719-104-34	s	DIODE 1S2836
D3	8-719-104-34	s	DIODE 1S2836
D4	8-719-104-34	s	DIODE 1S2836
D5	8-719-104-34	s	DIODE 1S2836
D6	8-719-104-34	s	DIODE 1S2836
D7	8-719-104-34	s	DIODE 1S2836
D8	8-719-104-34	s	DIODE 1S2836
D9	8-719-104-34	s	DIODE 1S2836
D10	8-719-919-97	s	DIODE LD-101MG-K
D11	8-719-920-05	s	DIODE SLP281C-50
D12	8-719-800-26	s	DIODE TLUG164
D12	8-719-800-26	s	DIODE TLUG164
D13	8-719-800-26	s	DIODE TLUG164
D14	8-719-800-26	s	DIODE TLUG164
D15	8-719-800-26	s	DIODE TLUG164
D16	8-719-800-26	s	DIODE TLUG164
D17	8-719-800-26	s	DIODE TLUG164
D18	8-719-938-68	s	DIODE GL-3HY8
D19	8-719-939-52	s	DIODE LA-301ML
D20	8-719-939-52	s	DIODE LA-301ML
IC1	8-759-926-80	s	IC SN74HC573NS
IC2	8-759-926-80	s	IC SN74HC573NS
IC3	8-759-926-80	s	IC SN74HC573NS
IC4	8-759-208-62	s	IC TC5068BP
IC5	8-759-208-62	s	IC TC5068BP
L1	1-408-417-21	s	47uH
L2	1-408-417-21	s	47uH
Q1	8-729-920-34	s	TRANSISTOR DTC143XK
Q2	8-729-920-34	s	TRANSISTOR DTC143XK

(VR-96 BOARD "RCP-3710 ONLY")

Ref. No. or Q'ty	Part No.	SP	Description
	8-729-920-34	s	TRANSISTOR DTC143XK
	8-729-920-34	s	TRANSISTOR DTC143XK
	8-729-920-34	s	TRANSISTOR DTC143XK
	8-729-920-34	s	TRANSISTOR DTC143XK
	8-729-920-34	s	TRANSISTOR DTC143XK
	8-729-920-34	s	TRANSISTOR DTC143XK
	8-729-920-34	s	TRANSISTOR DTC143XK
)	8-729-920-34	s	TRANSISTOR DTC143XK
1	8-729-920-34	s	TRANSISTOR DTC143XK
2	8-729-920-34	s	TRANSISTOR DTC143XK
3	8-729-920-34	s	TRANSISTOR DTC143XK
4	8-729-920-34	s	TRANSISTOR DTC143XK
5	8-729-920-34	s	TRANSISTOR DTC143XK
6	8-729-920-34	s	TRANSISTOR DTC143XK
7	8-729-920-34	s	TRANSISTOR DTC143XK
8	8-729-920-34	s	TRANSISTOR DTC143XK
9	8-729-920-34	s	TRANSISTOR DTC143XK
0	8-729-920-34	s	TRANSISTOR DTC143XK
1	8-729-920-34	s	TRANSISTOR DTC143XK
2	8-729-920-34	s	TRANSISTOR DTC143XK
3	8-729-920-34	s	TRANSISTOR DTC143XK
4	8-729-920-34	s	TRANSISTOR DTC143XK
5	8-729-271-23	s	TRANSISTOR 2SC2712
6	8-729-271-23	s	TRANSISTOR 2SC2712
7	8-729-271-23	s	TRANSISTOR 2SC2712
8	8-729-271-23	s	TRANSISTOR 2SC2712
9	8-729-271-23	s	TRANSISTOR 2SC2712
0	8-729-271-23	s	TRANSISTOR 2SC2712
1	8-729-271-23	s	TRANSISTOR 2SC2712
2	8-729-271-23	s	TRANSISTOR 2SC2712
3	8-729-271-23	s	TRANSISTOR 2SC2712
4	8-729-271-23	s	TRANSISTOR 2SC2712
5	8-729-271-23	s	TRANSISTOR 2SC2712
6	8-729-271-23	s	TRANSISTOR 2SC2712
7	8-729-271-23	s	TRANSISTOR 2SC2712
8	8-729-271-23	s	TRANSISTOR 2SC2712
	1-216-033-00	s	METAL CHIP 220 5% 1/10W
?	1-216-049-00	s	METAL CHIP 1K 5% 1/10W
3	1-216-053-00	s	METAL CHIP 1.5K 5% 1/10W
	1-216-053-00	s	METAL CHIP 1.5K 5% 1/10W
5	1-216-029-00	s	METAL CHIP 150 5% 1/10W
5	1-216-029-00	s	METAL CHIP 150 5% 1/10W
7	1-216-041-00	s	METAL CHIP 470 5% 1/10W
3	1-216-017-00	s	METAL CHIP 47 5% 1/10W
)	1-216-039-00	s	METAL CHIP 390 5% 1/10W
10	1-216-039-00	s	METAL CHIP 390 5% 1/10W
11	1-216-041-00	s	METAL CHIP 470 5% 1/10W
12	1-216-041-00	s	METAL CHIP 470 5% 1/10W
13	1-216-041-00	s	METAL CHIP 470 5% 1/10W
14	1-216-041-00	s	METAL CHIP 470 5% 1/10W
15	1-216-041-00	s	METAL CHIP 470 5% 1/10W
16	1-216-041-00	s	METAL CHIP 470 5% 1/10W
17	1-216-029-00	s	METAL CHIP 150 5% 1/10W
18	1-216-029-00	s	METAL CHIP 150 5% 1/10W
19	1-216-041-00	s	METAL CHIP 470 5% 1/10W
20	1-216-029-00	s	METAL CHIP 150 5% 1/10W
21	1-216-039-00	s	METAL CHIP 390 5% 1/10W
22	1-216-029-00	s	METAL CHIP 150 5% 1/10W

(VR-96 BOARD "RCP-3710 ONLY")

Ref. No. or Q'ty	Part No.	SP	Description
R23	1-216-029-00	s	METAL CHIP 150 5% 1/10W
R24	1-216-029-00	s	METAL CHIP 150 5% 1/10W
R25	1-216-047-00	s	METAL CHIP 820 5% 1/10W
R26	1-216-047-00	s	METAL CHIP 820 5% 1/10W
R27	1-216-047-00	s	METAL CHIP 820 5% 1/10W
R28	1-216-047-00	s	METAL CHIP 820 5% 1/10W
R29	1-216-047-00	s	METAL CHIP 820 5% 1/10W
R30	1-216-047-00	s	METAL CHIP 820 5% 1/10W
R31	1-216-047-00	s	METAL CHIP 820 5% 1/10W
R32	1-216-047-00	s	METAL CHIP 820 5% 1/10W
R33	1-216-047-00	s	METAL CHIP 820 5% 1/10W
R34	1-216-047-00	s	METAL CHIP 820 5% 1/10W
R35	1-216-047-00	s	METAL CHIP 820 5% 1/10W
R36	1-216-047-00	s	METAL CHIP 820 5% 1/10W
R37	1-216-047-00	s	METAL CHIP 820 5% 1/10W
R38	1-216-047-00	s	METAL CHIP 820 5% 1/10W
RV1	1-238-293-11	s	RES, VAR, CARBON 10K
RV2	1-237-955-11	s	CARBON 10K
RV3	1-230-138-00	s	RES, VAR, CARBON 5K
RV4	1-230-138-00	s	RES, VAR, CARBON 5K
RV5	1-230-138-00	s	RES, VAR, CARBON 5K
RV6	1-230-138-00	s	RES, VAR, CARBON 5K
S1	1-554-043-41	s	SWITCH, PUSH
S2	1-570-209-11	s	SWITCH, PUSH
S3	1-570-209-11	s	SWITCH, PUSH
S4	1-554-048-00	s	SWITCH, PUSH
S5	1-554-048-00	s	SWITCH, PUSH
S6	1-570-210-11	s	SWITCH, PUSH
S7	1-570-207-41	s	SWITCH, PUSH
S8	1-570-207-41	s	SWITCH, PUSH
S9	1-570-207-41	s	SWITCH, PUSH
S10	1-570-207-41	s	SWITCH, PUSH
S11	1-554-048-00	s	SWITCH, PUSH
S12	1-554-048-00	s	SWITCH, PUSH
S13	1-570-207-41	s	SWITCH, PUSH
S14	1-570-206-91	s	SWITCH, PUSH
S15	1-570-207-91	s	SWITCH, PUSH
S16	1-570-207-71	s	SWITCH, PUSH
S17	1-570-208-11	s	SWITCH, PUSH

VR-97 BOARD "RCP-3711 ONLY"

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-7515-058-A	o	MOUNTED CIRCUIT BOARD, "VR-97"
2pcs	1-563-521-11	o	CONNECTOR, 20P, FEMALE
2pcs	1-566-474-11	o	PIN, SOCKET 2P Ser.No 10201 -
2pcs	1-566-475-11	o	PIN, SOCKET 3P
1pc	1-632-782-11	o	PRINTED CIRCUIT BOARD, "LED-97"
1pc	1-634-922-11	o	PRINTED CIRCUIT BOARD, "LED-108" Ser.No 10201 -
1pc	1-634-925-11	o	PRINTED CIRCUIT BOARD, "LED-110" Ser.No 10201 -
1pc	2-141-001-01	o	PLATE (D1), FIXED, RV
1pc	2-141-017-01	s	KNOB, RV
4pcs	4-876-607-21	o	COLLAR (E), PLATE, JACK
1pc	7-621-734-09	s	SET-SCT, HEX. 2.6X3
8pcs	7-682-546-04	s	SCREW +B 3X5
C1	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
C2	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
C3	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
C4	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
C5	1-164-232-11	s	CERAMIC CHIP 0.01uF 20% 100V
C6	1-127-491-00	s	ELECT SOLID 20uF 20%
CN1	1-566-404-11	o	CONNECTOR, 28P, MALE
CN2	1-566-391-11	o	CONNECTOR 12P
CN3	1-506-469-11	o	CONNECTOR, 4P, MALE
CN4	1-506-469-11	o	CONNECTOR, 4P, MALE
D1	8-719-104-34	s	DIODE 1S2836
D2	8-719-104-34	s	DIODE 1S2836
D3	8-719-104-34	s	DIODE 1S2836
D4	8-719-104-34	s	DIODE 1S2836
D5	8-719-104-34	s	DIODE 1S2836
D6	8-719-104-34	s	DIODE 1S2836
D7	8-719-104-34	s	DIODE 1S2836
D8	8-719-104-34	s	DIODE 1S2836
D9	8-719-104-34	s	DIODE 1S2836
D10	8-719-919-97	s	DIODE LD-101MG-K
D11	8-719-920-05	s	DIODE SLP281C-50
D12	8-719-800-26	s	DIODE TLUG164
D13	8-719-800-26	s	DIODE TLUG164
D14	8-719-800-26	s	DIODE TLUG164
D15	8-719-800-26	s	DIODE TLUG164
D16	8-719-800-26	s	DIODE TLUG164
D17	8-719-800-26	s	DIODE TLUG164
D18	8-719-938-68	s	DIODE GL-3HY8
D19	8-719-939-52	s	DIODE LA-301ML
D20	8-719-939-52	s	DIODE LA-301ML
IC1	8-759-926-80	s	IC SN74HC573NS
IC2	8-759-926-80	s	IC SN74HC573NS
IC3	8-759-926-80	s	IC SN74HC573NS
IC4	8-759-208-62	s	IC TC5068BP
IC5	8-759-208-62	s	IC TC5068BP
L1	1-408-417-21	s	47uH
L2	1-408-417-21	s	47uH
Q1	8-729-920-34	s	TRANSISTOR DTC143XK
Q2	8-729-920-34	s	TRANSISTOR DTC143XK
Q3	8-729-920-34	s	TRANSISTOR DTC143XK
Q4	8-729-920-34	s	TRANSISTOR DTC143XK
Q5	8-729-920-34	s	TRANSISTOR DTC143XK

(VR-97 BOARD "RCP-3711 ONLY")

Ref. No. or Q'ty	Part No.	SP	Description
Q6	8-729-920-34	s	TRANSISTOR DTC143XK
Q7	8-729-920-34	s	TRANSISTOR DTC143XK
Q8	8-729-920-34	s	TRANSISTOR DTC143XK
Q9	8-729-920-34	s	TRANSISTOR DTC143XK
Q10	8-729-920-34	s	TRANSISTOR DTC143XK
Q11	8-729-920-34	s	TRANSISTOR DTC143XK
Q12	8-729-920-34	s	TRANSISTOR DTC143XK
Q13	8-729-920-34	s	TRANSISTOR DTC143XK
Q14	8-729-920-34	s	TRANSISTOR DTC143XK
Q15	8-729-920-34	s	TRANSISTOR DTC143XK
Q16	8-729-920-34	s	TRANSISTOR DTC143XK
Q17	8-729-920-34	s	TRANSISTOR DTC143XK
Q18	8-729-920-34	s	TRANSISTOR DTC143XK
Q19	8-729-920-34	s	TRANSISTOR DTC143XK
Q20	8-729-920-34	s	TRANSISTOR DTC143XK
Q21	8-729-920-34	s	TRANSISTOR DTC143XK
Q22	8-729-920-34	s	TRANSISTOR DTC143XK
Q23	8-729-920-34	s	TRANSISTOR DTC143XK
Q24	8-729-920-34	s	TRANSISTOR DTC143XK
Q25	8-729-271-23	s	TRANSISTOR 2SC2712
Q26	8-729-271-23	s	TRANSISTOR 2SC2712
Q27	8-729-271-23	s	TRANSISTOR 2SC2712
Q28	8-729-271-23	s	TRANSISTOR 2SC2712
Q29	8-729-271-23	s	TRANSISTOR 2SC2712
Q30	8-729-271-23	s	TRANSISTOR 2SC2712
Q31	8-729-271-23	s	TRANSISTOR 2SC2712
Q32	8-729-271-23	s	TRANSISTOR 2SC2712
Q33	8-729-271-23	s	TRANSISTOR 2SC2712
Q34	8-729-271-23	s	TRANSISTOR 2SC2712
Q35	8-729-271-23	s	TRANSISTOR 2SC2712
Q36	8-729-271-23	s	TRANSISTOR 2SC2712
Q37	8-729-271-23	s	TRANSISTOR 2SC2712
Q38	8-729-271-23	s	TRANSISTOR 2SC2712
R1	1-216-033-00	s	METAL CHIP 220 5% 1/10W
R2	1-216-049-00	s	METAL CHIP 1K 5% 1/10W
R3	1-216-053-00	s	METAL CHIP 1.5K 5% 1/10W
R4	1-216-053-00	s	METAL CHIP 1.5K 5% 1/10W
R5	1-216-029-00	s	METAL CHIP 150 5% 1/10W
R6	1-216-029-00	s	METAL CHIP 150 5% 1/10W
R7	1-216-041-00	s	METAL CHIP 470 5% 1/10W
R8	1-216-017-00	s	METAL CHIP 47 5% 1/10W
R9	1-216-039-00	s	METAL CHIP 390 5% 1/10W
R10	1-216-039-00	s	METAL CHIP 390 5% 1/10W
R11	1-216-041-00	s	METAL CHIP 470 5% 1/10W
R12	1-216-041-00	s	METAL CHIP 470 5% 1/10W
R13	1-216-041-00	s	METAL CHIP 470 5% 1/10W
R14	1-216-041-00	s	METAL CHIP 470 5% 1/10W
R15	1-216-041-00	s	METAL CHIP 470 5% 1/10W
R16	1-216-041-00	s	METAL CHIP 470 5% 1/10W
R17	1-216-029-00	s	METAL CHIP 150 5% 1/10W
R18	1-216-029-00	s	METAL CHIP 150 5% 1/10W
R19	1-216-041-00	s	METAL CHIP 470 5% 1/10W
R20	1-216-029-00	s	METAL CHIP 150 5% 1/10W
R21	1-216-039-00	s	METAL CHIP 390 5% 1/10W
R22	1-216-029-00	s	METAL CHIP 150 5% 1/10W
R23	1-216-029-00	s	METAL CHIP 150 5% 1/10W
R24	1-216-029-00	s	METAL CHIP 150 5% 1/10W
R25	1-216-047-00	s	METAL CHIP 820 5% 1/10W

R-97 BOARD "RCP-3711 ONLY")

f. No. Q'ty	Part No.	SP	Description
6	1-216-047-00	s	METAL CHIP 820 5% 1/10W
7	1-216-047-00	s	METAL CHIP 820 5% 1/10W
8	1-216-047-00	s	METAL CHIP 820 5% 1/10W
9	1-216-047-00	s	METAL CHIP 820 5% 1/10W
0	1-216-047-00	s	METAL CHIP 820 5% 1/10W
1	1-216-047-00	s	METAL CHIP 820 5% 1/10W
2	1-216-047-00	s	METAL CHIP 820 5% 1/10W
3	1-216-047-00	s	METAL CHIP 820 5% 1/10W
4	1-216-047-00	s	METAL CHIP 820 5% 1/10W
5	1-216-047-00	s	METAL CHIP 820 5% 1/10W
6	1-216-047-00	s	METAL CHIP 820 5% 1/10W
7	1-216-047-00	s	METAL CHIP 820 5% 1/10W
8	1-216-047-00	s	METAL CHIP 820 5% 1/10W
9	1-216-025-00	s	METAL CHIP 100 5% 1/10W
1	1-238-293-11	s	RES, VAR, CARBON 10K
2	1-237-955-11	s	CARBON 10K
3	1-230-138-00	s	RES, VAR, CARBON 5K
4	1-230-138-00	s	RES, VAR, CARBON 5K
5	1-230-138-00	s	RES, VAR, CARBON 5K
6	1-230-138-00	s	RES, VAR, CARBON 5K
7	1-230-137-00	s	RES, VAR, CARBON 5K
8	1-230-137-00	s	RES, VAR, CARBON 5K
	1-554-043-41	s	SWITCH, PUSH
	1-570-209-11	s	SWITCH, PUSH
	1-570-209-11	s	SWITCH, PUSH
	1-554-048-00	s	SWITCH, PUSH
	1-554-048-00	s	SWITCH, PUSH
	1-570-210-11	s	SWITCH, PUSH
	1-570-207-41	s	SWITCH, PUSH
	1-570-207-41	s	SWITCH, PUSH
	1-570-207-41	s	SWITCH, PUSH
0	1-570-207-41	s	SWITCH, PUSH
1	1-554-048-00	s	SWITCH, PUSH
2	1-554-048-00	s	SWITCH, PUSH
3	1-570-207-41	s	SWITCH, PUSH
4	1-570-206-91	s	SWITCH, PUSH
5	1-570-207-91	s	SWITCH, PUSH
6	1-570-207-71	s	SWITCH, PUSH
7	1-570-208-11	s	SWITCH, PUSH
8	1-554-041-11	s	SWITCH, PUSH

FRAME

Ref. No. or Q'ty	Part No.	SP	Description
	1-224-981-31	s	RES, VAR, CERMET 5K "MASTER BLOCK" (FOR RCP-3710)
	1-230-817-11	s	RES, VAR, CARBON 5K "IRIS" (FOR RCP-3710)
	1-224-981-00	s	RES, VAR, CERMET 5K "IRIS" (FOR RCP-3711)
	1-570-504-11	s	SWITCH, MICRO "LOCK" (FOR RCP-3710)
CN1F(to MPU-52 BOARD)			
	1-563-882-11	o	HOUSING, 28P
	1-563-869-11	o	CONTACT, FEMALE AWG26-30
CN1F(to VR-96 BOARD)			
	1-563-882-11	o	HOUSING, 28P
	1-563-869-11	o	CONTACT, FEMALE AWG26-30
CN2F(to MPU-52 BOARD)			
	1-563-874-11	o	PLUG HOUSING, 12P
	1-563-869-11	o	CONTACT, FEMALE AWG26-30
CN2F(to VR-96 BOARD)			
	1-563-874-11	o	PLUG HOUSING, 12P
	1-563-869-11	o	CONTACT, FEMALE AWG26-30
CN3F(to MPU-52 BOARD)			
	1-562-153-11	o	PLUG HOUSING, 8P
	1-563-088-11	o	PLUG CONTACT, FEMALE, AWG24-30
CN3F(to VR-96 BOARD) (FOR RCP-3710)			
	1-562-151-11	o	PLUG HOUSING, 6P
	1-563-088-11	o	PLUG CONTACT, FEMALE, AWG24-30
CN3F(to VR-97 BOARD) (FOR RCP-3711)			
	1-562-149-11	o	PLUG HOUSING, 4P
	1-563-088-11	o	PLUG CONTACT, FEMALE, AWG24-30
CN4F(to VR-96 BOARD)			
	1-562-149-11	o	PLUG HOUSING, 4P
	1-563-088-11	o	PLUG CONTACT, FEMALE, AWG24-30
CN101	1-564-968-11	s	CONNECTOR, 16P FEMALE "CCU"
CN102	1-561-795-00	s	SOCKET 6P, FEMALE "PREVIEW"